Public Hearing Draft
Revisions to the Solid Waste Management Facility Regulations, 310 CMR 19.000

May, 2004

I. DEFINITIONS

Add several new definitions and replace the existing definition of "Zone II" with a new definition that refers directly to the Drinking Water Regulations. These proposed changes will make the solid waste regulations consistent with the recently promulgated modifications to the site assignment regulations.

Abutter means the owner of land sharing a common boundary or corner with the site of the proposed activity in any direction, including, but not limited to, land located directly across a street, way, creek, river, stream, brook or canal.

Action Leakage Rate (ALR) means the quantity of liquid collected from ~~a~~ the leak detection system of a double liner system over a specified period of time which, when exceeded, requires certain actions to be taken as described in a plan approved by the Department.

Asbestos Waste means Asbestos-Containing Material and Asbestos-Containing Waste Material as defined in the Air Pollution Control regulations at 310 CMR 7.00. ~~any material containing one percent or more asbestos by weight and anything contaminated with asbestos such as asbestos from pollution control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose a work area during a demolition/renovation operation, and demolition/renovation debris. As defined here asbestos waste includes, but is not limited to, "asbestos containing material" and "asbestos containing waste materials" as defined in 310 CMR 7.00.~~

Asphalt Pavement, Brick and Concrete means asphalt pavement, brick and concrete from construction activities and demolition of buildings, roads and bridges and similar sources.

Commercial Products means of or relating to goods. Commercial products are often unrefined, produced and distributed in large quantities for use~~. by industry~~. A commercial product may be solid like a concrete block, or loose like aggregate drainage material. A commercial product may be manufactured or produced using solely secondary materials.

Composite Liner means a groundwater protection system that is ~~liner~~ composed of two (2) or more low permeability layers where, typically, the upper layer consists of ~~a low permeability synthetic material~~ a FML (flexible membrane liner) or Geomembrane in direct contact with the lower layer consisting of a low permeability soil and/or a geosynthetic clay liner (GCL).

Construction and Demolition (C&D) Processing Facility means a handling facility where construction and demolition waste is brought, stored and processed (usually by sorting, crushing, shredding, screening, etc.) prior to transport ~~off-site~~ to a solid waste disposal facility or to other types of facilities for recycling, recovery or reuse.

Critical Contaminant of Concern (CCC) means contaminants identified by the Department to be of particular concern due to their toxicity, persistence, ability to bio-accumulate, or widespread occurrence.

Cumulative Receptor Cancer Risk means that risk as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Cumulative Receptor Non-Cancer Risk means that risk as defined in the Massachusetts

Contingency Plan, 310 CMR 40.0000.

Destructive Practices means any process that requires the demolition of commercial products manufactured using secondary materials in order to remove the commercial product from a location to recycle or otherwise manage.

Double Liner means a groundwater protection system that is comprised of two (2) ~~low permeability layers, or~~ liners~~, (a primary liner and a secondary liner),~~ that are separated by a drainage layer that provides a leak detection function by collecting any leachate that leaks through the primary liner.

Exposure means exposure as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Exposure Pathway means that pathway as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Exposure Point means that point as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Exposure Point Concentration means that concentration as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Factor of Safety means the ratio of the breaking stress of a structure to the estimated maximum stress in ordinary use

Flexible Membrane Liner (FML) or Geomembrane Liner means a continuous layer of low-permeability flexible polymeric material beneath, on the sides and/or on the top of a landfill or landfill cell~~, used as a barrier to minimize contaminant flow, such as leachate or landfill gas, to the environment~~.

Geonet or Geocomposite means a synthetic material with its primary function designed to facilitate drainage.

Geosynthetic Clay Liner (GCL) means a liner material that is comprised of a layer of sodium bentonite clay (or similar low permeability clay) either sandwiched and mechanically secured between two materials (typically synthetic) or chemically bonded to a synthetic material to create ~~an effective and~~ a continuous low permeability layer or liner.

Geotextile means a permeable synthetic material that can be a woven, nonwoven, composite, or knitted product~~, etc.~~ that fulfills several functions in civil engineering, especially separation, filtration, drainage and protection.

Hazardous Material is that material as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Interim Wellhead Protection Area (IWPA) means ~~an~~ that wellhead area established under 310 CMR 22.02, *Drinking Water.* ~~extending to a ½ mile radius from a public water supply wellhead which is intended to protect the wellhead pending the delineation of its Zone II.~~

Metal means ferrous and non-ferrous metals derived from used appliances, building materials, industrial equipment, transportation vehicles, and manufacturing processes.

No Significant Risk means that risk as defined in the Massachusetts Contingency Plan, 310 CMR 40.0000.

Primary Composite Liner means a composite liner that is the uppermost liner in a double liner system.

Secondary Composite Liner means a composite liner that is the lowest liner in a double liner system.

Secondary Material means a residue or waste material, or other material that is no longer suited for its originally intended purpose, and is proposed to be used for a different purpose.

Site Assignment means a determination by a board of health or by the Department as specified in M.G.L. c. 111, § 150A that:

(a) designates an area of land for one or more solid waste uses subject to conditions with respect to the extent, character and nature of the facility that may be imposed by the assigning agency after a public hearing in accordance with M.G.L. c.111, s.150A; or
(b) establishes that an area of land was utilized as a site for the disposal onto land of solid waste or as a site for a refuse disposal incinerator prior to July 25, 1955 ~~as provided in St. 1955, c. 310, § 2~~. The area of land ~~determined to be site~~ assigned under this subsection shall be limited to the lateral limits of the waste deposition area ("the footprint"), or the area occupied by the incinerator, as they existed on July 25, 1955, except as otherwise approved by the Department in approved plans. Said assignment shall apply only to uninterrupted solid waste disposal activities within the footprint or plan approved area and shall have no legal force or effect at any time after the cessation of disposal activities except as otherwise provided at 310 CMR 16.21. ~~commencement of non-disposal activities.~~

Upper Concentration Limits means ceiling concentrations established for hazardous materials when contained in secondary material intended for beneficial use.

Watershed means that area defined by 310 CMR 22.02, Drinking Water.

White Goods means ~~an appliance~~ appliances employing electricity, oil, natural gas or liquefied petroleum gas to ~~supply heat or motive power to preserve or cook food, to wash or dry clothing, cooking or kitchen utensils or related items or to cool or heat air or water.~~ preserve or cook food; wash or dry clothing, cooking or kitchen utensils or related items; or cool or heat air or water.

Wood means treated and untreated wood, but does not include woodwaste. [1]

Zone A means that area defined by 310 CMR 22.02, Drinking Water.

Zone B means that area defined by 310 CMR 22.02, Drinking Water.

Zone C means that area defined by 310 CMR 22.02, Drinking Water.

Zone of Contribution means the recharge area that provides water to a well.

Zone I means that area defined by 310 CMR 22.02, Drinking Water.

~~Zone II means that area of an aquifer which contributes water to a well under the most severe recharge and pumping conditions that can be realistically anticipated *(i.e.*, pumping at the safe yield of the well for 180 days without any natural recharge occurring); it is bounded by the groundwater divides which result from pumping the well and by contact of the edge of the aquifer with less permeable materials such as till and bedrock. At some locations, streams and lakes may form recharge boundaries. For the purposes of 310 CMR 19.000, a Zone II area is one which has~~

[1] "Woodwaste" is already defined in the solid waste regulations as follows: Woodwaste means discarded material consisting of trees, stumps, and brush, including but not limited to sawdust, chips, shavings and bark. Woodwaste does not include new or used lumber or wood from construction and demolition waste and does not include wood pieces or particles containing or likely to contain asbestos, chemical preservatives such as creosote or penta- chlorophenol, or paints, stains or other coatings.

~~been defined and delineated in accordance with the Department's Division of Water Supply *Guidelines for Public Water Systems*, September, 1984 Supplement to the 1979 edition or the most recent version thereof.~~

Zone II means that area defined by 310 CMR 22.02, Drinking Water.

19.011: Certification and Engineer's Supervision

(1) Certification . Any person, required by 310 CMR 19.000 or any order issued by the Department, to submit papers shall identify themselves by name, profession, and relationship to the applicant and legal interest in the facility, and make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties both civil and criminal for submitting false information including possible fines and imprisonment."

(2) Engineering Supervision . All papers pertaining to design, operation, maintenance, or engineering of a site or a facility shall be completed under the supervision of a Massachusetts registered professional engineer knowledgeable in solid waste facility design, construction and operation and shall bear the seal, signature and discipline of said engineer. The soils, geology, air modeling, air monitoring and groundwater sections of an application or monitoring report shall be completed by competent professionals experienced in the fields of soil science and soil engineering, geology, air modeling, air monitoring and groundwater, respectively, under the supervision of a Massachusetts registered professional engineer. All mapping and surveying shall be completed by a registered surveyor.

19.014: Prohibition on Open Dumps and Dumping Grounds and Illegal Disposal of Solid Waste

(1) No person shall establish, construct, operate or maintain a dumping ground or operate or maintain a landfill in such manner as to constitute an open dump. For the purpose of 310 CMR 19.014, the phrase "establish, construct, operate or maintain" shall include without limitation, disposing or contracting for the disposal of refuse in a dumping ground or open dump.

(2) No person shall dispose or contract for the disposal of solid waste at any place which has not been approved by the Department pursuant to M.G.L. c.111, s.150A, 310 CMR 16.00 or 310 CMR 19.000.

(3) No person shall dispose or contract for the disposal of solid waste at any facility that is not approved to manage the particular type of solid waste being disposed.

II. WASTE BANS – TEXT TO BE CHANGED

19.017: Waste Bans ~~Control~~

(1) Purpose . The Department may restrict or prohibit the disposal, or transfer for disposal, of certain components of the solid waste stream when it determines that:

(a) disposal of the material presents a potential adverse impact to public health, safety or the environment; or

(b) a restriction or prohibition will result in the extension of the useful life or capacity of a facility or class of facilities.

(2) General and Specific Restrictions . Where the Department makes a determination to restrict or prohibit the disposal, or transfer for disposal, of a particular material it may:

(a) require, as a condition of issuance of a permit, that a facility prohibit or limit the

disposal, or transfer for disposal, of particular types of material. Nothing in 310 CMR 19.017 shall limit the right of the Department to require the recycling of specific materials in accordance with 310 CMR 19.038(2)(e) ~~(d)~~;

(b) require as a condition of continued operation under an existing plan approval or permit that a facility or a class of facilities prohibit or limit the disposal, or transfer for disposal, of particular types of material; or

(c) determine that a specific facility or class of facilities are not approved for the disposal of particular types of material and may not contract for the disposal of particular types of material. For the purpose of 310 CMR 19.017 disposal or contract for disposal shall include, but not be limited to:

1. entering into an agreement to dispose of materials restricted from disposal in violation of 310 CMR 19.000; or
2. depositing restricted materials for collection, contracting for the collection of such materials or collecting such materials in a manner which results in the disposal of materials in violation of 310 CMR 19.000; or
3. intentionally contaminating or co-mingling with solid waste pre-sorted material restricted from disposal which would result in the need to dispose of said material in violation of 310 CMR 19.000.

(3) Waste Specific Restrictions .

(a) Effective on the dates specified in Table 310 CMR 19.017(3) restrictions on the disposal or transfer for disposal of the materials listed therein shall apply as specified. No person shall dispose, transfer for disposal, or contract for disposal of the restricted material except in accordance with the restriction established in the table. No landfill, transfer facility or combustion facility shall accept the restricted material except to handle, recycle or compost the material in accordance with a plan submitted pursuant to 310 CMR 19.017(5) and approved by the Department.

~~(b) On or before six months prior to the effective date of the restrictions on yard wastes, aluminum containers, metal or glass containers, single polymer plastics, and recyclable paper specified in Table 310 CMR 19.017(3) the Department may issue written guidance concerning the specific materials within each of the categories to which the restriction shall apply.~~

(b) ~~(c)~~ On the effective date of the restrictions on Cathode Ray Tubes (CRTs), specified in Table 310 CMR 19.017(3), all persons shall segregate CRTs from the solid waste stream.

Table 310 CMR 19.017(3)

Restricted Material	Effective Date of Restriction for Landfills or Com-bustion Facilities	Effective Date of Restriction for Transfer Facilities	Restriction
Lead Batteries	December 31, 1990	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Leaves	December 31, 1991	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility

Tires	December 31, 1991	April 1, 2000	Ban on disposal or transfer for disposal of whole tires only at landfills. Tires must be shredded prior to disposal in landfills.
White Goods	December 31, 1991	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Other Yard Waste	December 31, 1992	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Aluminum Containers	December 31, 1992	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Metal or Glass Containers	December 31, 1992	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Single Polymer Plastics	December 31, 1994	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Recyclable Paper	December 31, 1994	April 1, 2000	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Cathode Ray Tubes	April 1, 2000	April 1, 2000	Ban on disposal~~,~~ or incineration~~,~~ or transfer for disposal~~,~~ at a solid waste disposal facility
Asphalt Pavement, Brick and Concrete	[9 months after the effective date of the regulations]	[9 months after the effective date of the regulations]	Ban on disposal or incineration or transfer for disposal at a solid waste disposal facility
Metal	[9 months after the effective date of the	[9 months after the effective date of the	Ban on disposal or incineration or transfer for disposal at a solid waste

	regulations]	regulations]	disposal facility
Wood	[9 months after the effective date of the regulations]	[9 months after the effective date of the regulations]	Ban on disposal or transfer for disposal at landfills

(4) Criteria for Determinations of Waste Restrictions on Other Materials . In determining whether to restrict or prohibit the disposal of other materials the Department may consider:

(a) the nature and degree of potential adverse impacts;

(b) the quantities of restricted materials generated;

(c) the availability of non-disposal management options for the restricted materials;

(d) the economic impact on the facility, class of facilities or generators subject to the restriction;

(e) such other factors as the Department deems relevant to such a determination.

(5) Waste Ban ~~Restriction~~ Plan Submissions .

(a) The permittee or operator shall submit a plan, or modify an existing approved plan to include newly banned materials, which describes the actions to be taken to comply with the restrictions imposed at 310 CMR 19.017(3). The plan shall be submitted to the appropriate regional office of the Department.

(b) The waste ban plan shall address the following:

1. Ongoing waste stream monitoring of all incoming loads, including:
    a. load selection;
    b. monitoring procedures;
    c. unacceptable quantities and de minimus acceptable quantities; and
    d. record keeping.
2. Comprehensive load inspections, including:
    a. loads not subject to comprehensive load inspections;
    b. load selection;
    c. inspection procedures;
    d. unacceptable quantities and de minimus acceptable quantities; and
    e. record keeping.
3. Facility response to failed loads, including:
    a. communication; and
    b. failed load disposition.
4. Other compliance plan elements, including:
    a. training;
    b. signage; and
    c. annual waste ban report.

(c) ~~(b)~~ In determining the adequacy of a plan the Department may consider, without limitation: the anticipated quantities and sources of restricted materials; the contractual terms which affect the delivery of said materials; the expected maximum and minimum percentages of diversion of said materials prior to delivery to the facility and capture of said materials at the facility; the design, operational, educational, informational, financial and marketing mechanisms to be employed to achieve compliance with the restriction; and the weighing and record keeping systems by which the Department can verify compliance with the restriction.

(d) ~~(c)~~ Facilities shall submit such plans at least 90 days prior to the effective date of the ban. ~~in accordance with the schedule established in Table 310 CMR 19.017(5).~~ The schedule shall not limit the Department from requiring submission of a plan as part of an application for a new or existing facility permit or modification of a permit or plan approval.

~~**Table 310 CMR 19.017(5)**~~

~~**Restricted Material**~~	~~**Tonnage Received by the Facility per Day**~~	~~**Days Prior to the Effective Date of the Restriction Plan is Due**~~
~~Lead Batteries~~	~~> 300 TPD~~	~~90 days~~
	~~0 - 300 TPD~~	~~In accordance with schedule set forth in a notice from the Department~~
~~Cathode Ray Tubes at all facilities~~		~~Within 90 days of October 1, 1999~~
~~Other Restricted Materials~~	~~> 1000 TPD~~	~~150 days~~
	~~500 - 999 TPD~~	~~120 days~~
	~~300 - 499 TPD~~	~~90 days~~
	~~100 - 299 TPD~~	~~60 days~~
	~~< 100 TPD~~	~~30 days~~
~~All restricted materials at transfer facilities~~		~~Within 90 days of October 1, 1999~~

(6) Exceptions . The Department may allow a facility or person to temporarily dispose or temporarily contract for the disposal of restricted materials, with prior notification and approval of the Department, under the following circumstances:

(a) the material is contaminated or is otherwise not acceptable for recycling or composting provided that the person who contaminated or rendered the material unfit for recycling or composting is notified and takes any action necessary to prevent a recurrence of the conditions which contaminated or rendered the material unfit; or

(b) the recycling or composting operation or end user to which the restricted material is normally sent declines to accept the material or is prohibited from accepting the material as a result of an administrative or judicial order, provided that an alternative recycling or composting operation or storage facility which will accept the material cannot be found within a reasonable time.

(7) Compliance with a Restriction or Prohibition . Failure to comply with approved plans submitted pursuant to 310 CMR 19.017(5) or applicable permit conditions shall constitute a violation of 310 CMR 19.000. The Department may allow *de minimis* quantities of restricted materials, as determined by the Department, to be disposed by the facility. The Department may, in lieu of an enforcement action described in 310 CMR 19.081, require a

modified plan to be submitted when restricted materials are being disposed of in excess of approved amounts.

III. PERMITTING REQUIREMENTS – TEXT TO BE CHANGED

19.020: Permit Requirements for Solid Waste Management

(1) Permit Requirements for Construction and Operation of Solid Waste Management Facilities. ~~Except as allowed under 310 CMR 19.021,~~ No person shall construct, operate or maintain a facility to store, process, transfer, treat or dispose of solid waste except in accordance with:

(a) a valid site assignment;

(b) a solid waste management facility permit (~~hereafter permit "~~permit"), issued after May, 1990 in accordance with 310 CMR 19.000, an Existing Facility Permit issued pursuant to the Solid Waste Management Facility regulations in effect on July 1, 1990, or a Permit By Rule for Certain Transfer Stations issued pursuant to the Solid Waste Management Facility regulations in effect on July 1, 1990;

(c) an authorization to construct the facility issued by the Department in accordance with 310 CMR 19.041; and

(d) an authorization to operate the facility issued by the Department in accordance with 310 CMR 19.042.

(2)~~(4)~~ Inactive Landfill Facility~~y~~ies ~~Filing~~ **[NOTE: This section was moved from 19.021(4)]**

(a) Prior to January 1, 1992, the owner of an inactive landfill or dumping ground that was in operation after April 21, 1971 but ceased operations prior to July 1, 1990 shall have filed:

1. proof that the facility was closed in accordance with plans approved by the Department; or
2. a final closure and post-closure plan in accordance with 310 CMR 19.030(3)(c)5. if the facility was not closed in accordance with a closure/post-closure plan approved by the Department.

(b) The owner of an inactive landfill or dumping ground that ceased operations prior to April 21, 1971 may be required to file a final closure and post closure-plan if so ordered by the Department.

~~19.021: Transition Requirements for Existing Facilities~~

~~(1) Continued Operation and Maintenance of Existing Facilities. After July 1, 1990 and until an existing approval or permit expires in accordance with 310 CMR 19.021(2) an existing facility may continue to operate and conduct the solid waste activities approved under its prior approval or permit provided:~~

~~(a) the facility has a valid site assignment;~~

~~(b) the facility operates in accordance with either an approved plan issued by the Department on or before December 17, 1987 and letter of compliance issued pursuant to 310 CMR 19.04(3) [1971 landfill regulations] or 310 CMR 18.04 [1980 Transfer Station Regulations]; or with a permit issued by the Department pursuant to its Interim Policy on Issuance of Solid Waste Management Facility Permits (SWM 13 6/89) prior to July 1, 1990 and written authorization to operate;~~

~~(c) operations are conducted in accordance with the conditions of the prior approval or permit and the applicable operation and maintenance requirements of 310 CMR 19.000;~~

~~(d) an authorization to operate pursuant to 310 CMR 19.042 is granted before operations commence in any new area;~~

~~(e) the facility, if a landfill or solid waste combustion facility, complies with the requirements set forth at 310 CMR 19.017: *Waste Control*; and~~

~~(f) an existing facility permit application has been filed in accordance with the schedule set forth in 310 CMR 19.021(3).~~

~~(2) Expiration of Existing Approvals or Permits. Plan approvals and permits granted by the Department prior to July 1, 1990 (prior approval or permit) shall no longer be valid when:~~

~~(a) the owner or operator fails to submit an existing facility permit application within the period specified in 310 CMR 19.021(3)(a), (b), (d) and (e) and, for facilities subject to 310 CMR 19.021(3)(c), prior to October 1, 1992; or~~

~~(b) the prior approval or permit is superceded by a facility permit granted by the Department in accordance with 310 CMR 19.000; or~~

~~(c) the Department denies the application for a facility permit; or~~

~~(d) the Department suspends or revokes the existing approval or permit; or~~

~~(e) the prior approval or permit expires and is not renewed or extended by the Department.~~

~~(3) Existing Facility Filing Schedule. Except as specified under 310 CMR 19.021(4), Inactive Landfill Facility Filing Schedule, facilities shall file with the Department as follows:~~

~~(a) The owner of an existing facility which will operate after July 1, 1992 shall submit an existing facility permit application, as specified at 310 CMR 19.030(4), prior to July 1, 1991 where:~~

~~1. the existing combustion facility is located in an area described in 310 CMR 19.038(2)(b)1. or 2. [Zone II, IWPA, unmonitorable]; or~~

~~2. an existing landfill is located in an area described in 310 CMR 19.038(2)(c)1. or 2. [Zone II, IWPA, Sole Source Aquifer, unmonitorable]; or~~

~~3. the landfill or combustion facility is approved or permitted to dispose of 50,000 tons per year or more of solid waste.~~

~~(b) The owner of an existing facility which will close on or before July 1, 1992 shall file a final closure and post-closure plan in accordance with 310 CMR 19.030(3)(c)5. prior to closure of the facility.~~

~~(c) The owner of an existing landfill or combustion facility, other than those specified in 310 CMR 19.021(3)(a) or (b), shall file an existing facility application, pursuant to 310 CMR 19.030(4) prior to July 1, 1992.~~

~~(d) The owner of an existing handling facility located in an area described in 310 CMR 19.038(2)(b)1. or 2. shall submit a complete registration, in accordance with 310 CMR 19.030(5) prior to July 1, 1991 and a complete existing facility permit application prior to July 1, 1993.~~

~~(e) The owner of an existing handling facility, other than those specified in 310 CMR 19.021(3)(d), shall file an existing facility permit application prior to July 1, 1993.~~

~~(f) Failure to make a timely submission to the Department in accordance with 310 CMR 19.021(3) shall constitute violation of 310 CMR 19.000.~~

~~(4) Inactive Landfill Facility Filing Schedule~~ **[NOTE: This section has been moved to 19.020(2)]**

~~(a) Prior to January 1, 1992, t~~The owner of an inactive landfill or dumping ground that ~~was in operation after April 21, 1971 but ceased operations prior to July 1, 1990 shall file:~~

~~1. proof that the facility was closed in accordance with plans approved by the Department; or~~

~~2. a final closure and post-closure plan in accordance with 310 CMR 19.030(3)(c)5. if the facility was not closed in accordance with a closure/post-closure plan approved by the Department.~~

~~(b) The owner of an inactive landfill or dumping ground that ceased operations prior to April 21, 1971 may be required to file a final closure and post closure plan if so ordered by the Department.~~

~~(5) Pending Actions. Nothing in this section shall modify any Departmental action or order, or any order~~

or judgment of a court of competent jurisdiction pending or final prior to July 1, 1990 or the scope or timetable for performance contained in such judgment or order; or limit the right of the Department to issue administrative orders or penalties or seek court actions based on conditions existing prior to July 1, 1990.

19.022: Accelerated Closure Schedules

(1) Existing Landfills.

(a) Existing landfills which are located in areas described at 310 CMR 19.038(2)(c)1. or 2. [Zone II, IWPA, sole source aquifer, and unmonitorable area] shall complete closure of the entire landfill prior to July 1, 1995.

(b) Existing landfills or phases thereof, other than those described above at 310 CMR 19.022(1)(a), shall cease accepting solid waste in all unlined phases prior to January 1, 1994 and shall have completed closure of those unlined phases no later than July 1, 1995.

(2) Existing Combustion Facilities and Handling Facilities.

(a) Existing combustion facilities and handling facilities which are located in areas described at 310 CMR 19.038(2)(b)1. or 2. [Zone II, IWPA, or unmonitorable] shall close prior to July 1, 1995, unless:

1. the applicant demonstrates that the continued operation of the facility shall not now nor in the reasonably foreseeable future adversely impact an existing or potential public water supply; and

2. the applicant demonstrates that there are no reasonable alternatives to the continued operation of the facility; and

3. the owner conducts such water and air monitoring, testing and analysis as the Department deems necessary to assess the current and future impact of the facility on public health, safety and the environment and conducts studies for the purpose of finding alternative capacity that is not located in a restricted area.

19.023: Permit by Rule for Certain Existing Transfer Stations

(1) General. The Department hereby grants a permit and an Authorization to Operate to certain existing transfer stations, subject to the application and other requirements specified in 310 CMR 19.023.

(2) Applicability. An application for a permit pursuant to 310 CMR 19.023, may only be made by existing transfer stations that were in operation on July 1, 1990 and are not located in an area described in 310 CMR 19.038(2)(b)1. or 2. [IWPAs and Zone IIs]. All other existing transfer stations shall apply for a permit pursuant to 310 CMR 19.021(3).

(3) Permit Requirements. Any existing transfer station applying for a permit under 310 CMR 19.023 shall meet each of the following requirements. Any transfer station which does not conform to each of the following provisions does not qualify for a permit pursuant to 310 CMR 19.023 and is subject to the permitting process set forth at 310 CMR 19.032 or 19.037, as applicable.

(a) A complete existing facility permit application, as specified at 310 CMR 19.030(4), shall be submitted to the Department on the schedule established at 310 CMR 19.021(3)(f);

(b) The existing facility permit application is submitted in compliance with 310 CMR 19.030(6) and 19.030(8) through (11);

(c) The existing transfer station:

1. is not sited in an area described at 310 CMR 19.038(2)(b)1. or 2. [IWPAs and Zone IIs];

2. was in operation on or before July 1, 1990;

3. has a valid site assignment;

4. has a valid plan approval or permit granted by the Department prior to July 1, 1990;

~~5. the facility is in compliance with the prior plan approval or permit including all conditions of that prior plan approval or permit;~~
~~6. has no outstanding enforcement actions pending; and~~
~~7. the facility is operating in compliance with 310 CMR 19.205-19.299.~~

~~(4) Additional Information. Notwithstanding the provisions at 310 CMR 19.023(3), the Department may notify the applicant that additional data must be submitted or further actions taken before a permit will be granted. In addition, the Department may impose such conditions as it deems necessary in accordance with 310 CMR 19.043.~~

~~(5) The Permit. Where each of the requirements set forth at 310 CMR 19.023(3) are met at the time of application, a valid plan approval or permit issued prior to July 1, 1990 shall be considered a valid permit and Authorization to Operate pursuant to 310 CMR 19.000, for all purposes herein.~~

19.030: Application for a Solid Waste Management Facility Permit

(1) General. Any person intending to construct, operate or maintain a solid waste management facility shall file an application for a ~~solid waste management facility~~ permit. ~~(permit).~~ Applications shall consist, at minimum, of the plans, descriptions, reports and other information required in 310 CMR 19.030(3). ~~(4), or (5).~~

(2) Facility Specific Plans. In addition to the plan requirements set forth in 310 CMR 19.030(3), the applicant for a new facility shall submit such additional or alternative information as required in other Parts of 310 CMR 19.000 governing the permitting of specific types of solid waste management facilities.

(3) Application. An application for a ~~new solid waste management facility~~ permit shall include:
(a) a completed application on a form as may be provided by the Department;
(b) applicant identification which shall include such information and documentation as the Department deems necessary to fully identify all persons having a legal or financial interest in, or operational responsibility for the site or facility; those persons' legal status; their prior ownership or operating history of solid waste facilities and other relevant information which identifies the applicant and the applicant's competency to own~~/~~ and/or operate a facility;
(c) a solid waste management facility plan (plan) for the particular type of solid waste management facility including such maps, data, information and documents as required in the facility specific regulations. The Plan shall, at a minimum, be comprised of the following components:
1. a site plan which shall include such maps, diagrams, reports and other information the Department deems necessary to accurately locate the proposed site and facility, identify its geographical characteristics, identify the zoning of the site, and evaluate the potential impact of the construction and operation of the proposed facility on surrounding land uses, traffic flow, surface water bodies, wetlands, water supplies, and flood zones;
2. a recycling and composting plan for landfills~~,~~ and combustion facilities ~~(excluding infectious waste incinerators)~~ accepting municipal solid waste or construction and demolition wastes. The recycling and composting plan shall include:
a. an analysis of the types and estimated amounts of municipal solid waste and other types of waste generated by municipalities and commercial customers ~~within the geographic area~~ to be served by the facility;
b. a description of the recycling activities and recycling percentages currently being achieved by municipalities ~~and commercial customers~~ served by the facility; and
c. ~~b.~~ a description of the types and estimated quantities of materials to be diverted for recycling and composting. Where the facility intends ~~is~~ to recycle or compost materials on-site, a description of the methods, equipment and procedures to be used to recycle or compost.~~; and~~

~~c. a description of the types and quantities of materials to be recycled and composted at recycling or composting facilities within the geographic area served by the facility for which the applicant seeks credit pursuant to 310 CMR 19.038(2)(d).~~

3. a facility design plan which shall provide such diagrams, reports, studies and other information as the Department deems necessary to evaluate the feasibility and potential impacts of the facility on public health, safety and the environment. The facility design plan shall address all aspects of the facility design and shall include:

a. a detailed description of the type and size of the proposed facility;

b. the nature and amount of refuse to be handled on a daily and weekly basis;

c. a detailed description of the design of the facility, including recycling and composting components, site improvements and all systems and other appurtenances thereto necessary to comply with:

i. the operation and maintenance requirements;

ii. the closure and post-closure requirements; and

iii. permit approval criteria;

d. provision to minimize the impacts of site and facility construction; and

e. other design provisions the Department deems necessary on a site or facility specific basis to ensure proper design;

4. an operation and maintenance plan which shall provide such diagrams, reports, studies, and other information as the Department deems necessary to evaluate the ability of the proposed operation and maintenance procedures to ensure good solid waste management practices and to protect public health and safety and the environment. The operation and maintenance plan shall include:

a. a detailed description of the proposed waste handling methods and techniques, and sequence of operations for the facility;

b. a description of the procedures to be employed to comply with the operation and maintenance requirements for the specific type of facility and the permit approval criteria;

c. a detailed description of the environmental monitoring and sampling protocols and procedures and inspection and maintenance of the environmental monitoring systems;

d. ~~a detailed description of how the facility will comply with the recycling criteria set forth in 310 CMR 19.038(2)(d). The operation and maintenance plans must contain~~ a tracking and reporting system by which the Department can verify compliance with recycling requirements and with bans on acceptance of certain types of solid waste or recyclable materials which have been imposed pursuant to 310 CMR 19.0178 and are in effect at the time the permit is granted;

e. a compliance and inspection plan to ensure operation of the facility is in compliance with the permit and all applicable regulations; and

f. other operation and maintenance provisions that the Department deems necessary on a site or facility specific basis to ensure proper operation and maintenance;

5. a closure and ~~/~~post-closure plan which shall provide such diagrams, reports, studies and other information as the Department deems necessary to describe and evaluate the procedures the applicant proposes to use to close the facility and maintain and care for the site during the post-closure period in a manner that minimizes the impacts to public health and safety and the environment. A closure and ~~/~~post-closure plan shall include:

a. a description of the activities, and the sequence of activities necessary to ~~deactivate and/or~~ close the facility;

b. a description of measures to be utilized to comply with the closure and post-closure requirements set forth in 310 CMR 19.045 and other applicable sections of 310 CMR 19.000 ;

c. a description of proposed subsequent use of the site and/or facility, if any; and

d. other provisions that the Department deems necessary on a site or facility specific basis to ensure proper closure of the facility.

(d) a public health report, if any, as submitted by the Department of Public Health pursuant to the Site Assignment Regulations, 310 CMR 16.17;
(e) sufficient documentation ~~proof~~ that the proposed facility will be located within the boundaries of a valid site assignment; and
(f) sufficient documentation ~~a demonstration~~ that:
1. the MEPA process does not apply;
2. the MEPA process does apply and the Secretary has determined that an Environmental Impact Report is required; or
3. the MEPA process has already been completed and the Secretary has issued a certificate or a determination that no EIR is required.
(g) The first Technical Review Period (TR1) as specified under 310 CMR 4.00: Timely Action and Fee Provisions, shall not be completed until the Secretary's final MEPA certificate has been issued for the project.

~~(4) Permit Application Requirements for Existing Facilities.~~
~~(a) General Requirements for all existing facilities. An application for a solid waste management facility permit for an existing facility shall include:~~
~~1. the names and addresses of the current owner(s) and operator(s);~~
~~2. a locus map of the site;~~
~~3. a site plan indicating the distances from the border of waste handling and disposal operations to existing and potential public water supplies, the Zone II or IWPA of an existing or potential public water supply, where applicable, and the distances to residences utilizing private drinking water wells within ½ mile of the site;~~
~~4. a description of the facility type, permitted tonnage, remaining approved capacity and estimated useful life and the type and quantity of recycling, composting and waste processing occurring on site;~~
~~5. the dates and file numbers of the facility site assignment and prior Department approvals or permits for design, construction and operation;~~
~~6. a description of the current status of outstanding enforcement actions or compliance orders; and~~
~~7. other information, maps or plans as may be required by the Department to determine the facility's compliance with 310 CMR 19.000.~~
~~(b) Additional Requirements for Landfills that WILL Dispose of Waste on or after January 1, 1994 and Combustion Facilities. In addition to the submittal requirements specified in 310 CMR 19.030(4)(a), landfills that will dispose of waste on or after January 1, 1994 and combustion facilities shall also include:~~
~~1. a description of modified operation and maintenance procedures, environmental monitoring and protection systems accompanied by a plan with a schedule, where necessary, which describes the prospective corrective actions the applicant shall take to bring the facility into compliance with 310 CMR 19.000. In particular, a facility must demonstrate how it will comply with the following sections of 310 CMR:~~
~~a. 310 CMR 19.017: *Waste Control*;~~
~~b. 310 CMR 19.030(3)(c)2., recycling and composting plan;~~
~~c. 310 CMR 19.030(3)(c)4., operation and maintenance plan;~~
~~d. 310 CMR 19.030(3)(c)5., closure/post-closure plan;~~
~~e. 310 CMR 19.038, criteria for permit approval;~~
~~f. 310 CMR 19.042, authorization to operate;~~
~~g. 310 CMR 19.061, special waste; and~~
~~h. the facility specific Parts of 310 CMR 19.000 governing environmental protection and monitoring systems.~~
~~(c) Additional Requirements for Landfills That WILL NOT Dispose of Waste on or after January 1, 1994. In addition to the submittal requirements specified in 310 CMR 19.030(4)(a), landfills which will not dispose of waste on or after January 1, 1994 shall also file an interim closure plan. The interim closure plan shall include:~~

~~1. a topographic map of the site showing current and proposed final grades;~~
~~2. a schedule for closure of the landfill including a schedule for an Initial Site Assessment and scope of work for a Comprehensive Site Assessment as set forth at 310 CMR 19.150;~~
~~3. an estimate of closure and post-closure costs to be incurred to close and monitor the site in accordance with 310 CMR 19.000; and~~
~~4. a description of the means by which the owner/operator will finance closure and post-closure activities and a schedule of activities which will be conducted to obtain the necessary financing.~~

~~(5) Registration for Handling Facilities. Registration for an existing handling facility shall include:~~
~~(a) the names and addresses of the current owner(s) and operator(s);~~
~~(b) a locus map of the site;~~
~~(c) a site plan indicating the distances from the border of waste handling and disposal operations to existing and potential public water supplies, the Zone II or IWPA of an existing or potential public water supply, where applicable, and the distances to residences utilizing private drinking water wells within ½ mile of the site;~~
~~(d) a description of the facility type, permitted tonnage, remaining approved capacity and estimated useful life and the type and quantity of recycling, composting and waste processing occurring on site;~~
~~(e) the dates and file numbers of the facility site assignment and prior Department approvals or permits for design, construction and operation; and~~
~~(f) a description of the current status of outstanding enforcement actions or compliance orders;~~
~~(g) other information, maps or plans as may be required by the Department to determine the facility's compliance with 310 CMR 19.000.~~

(4)~~(6)~~ Filing and Confidentiality.

(a) The applicant shall file one copy of the application or registration with the Department in the appropriate Regional Office.

(b) Any information submitted pursuant to 310 CMR 19.000 may be claimed as confidential by the applicant in accordance with the provisions of 310 CMR 3.00: *Access to and Confidentiality of Department Records and Files*, except information regarding the name and address of the permittee and data related to the potential impact of the proposed activity on public health, safety and the environment.

(5)~~(7)~~ Variance. The application shall clearly state whether a variance is requested, as provided in 310 CMR 19.080.

(6)~~(8)~~ Presentation of Information. Information set forth in the application for a permit shall be current, presented clearly and concisely using forms~~,~~ as may be provided by the Department, and supported by appropriate references to technical and other documents made available to the Department. The application shall contain sufficient data and other relevant information to allow the Department to determine, independent of additional information, whether to issue the Permit.

(7)~~(9)~~ Supervision. All papers pertaining to design, operation, maintenance, or engineering of a site or a facility shall bear the seal of a supervising engineer or other applicable person as required at 310 CMR 19.011(2).

(8)~~(10)~~ Certification. Applications shall be signed and certified to by the applicant as to all statements of fact therein in accordance with 310 CMR 19.011.

(9)~~(11)~~ Signatories. All applications for permits, authorizations or modifications submitted pursuant to 310 CMR 19.000 shall be signed as follows:

(a) If the applicant is a corporation, by an individual who is a responsible corporate officer of the corporation and who is authorized by the corporation, in accordance with corporate procedures, to sign such documents on behalf of the corporation. As used in this section, "responsible corporate officer" shall mean a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other individual who performs for the corporation policy-making or decision-making functions similar to those performed by a president, secretary, treasurer, or vice-president.
(b) If the applicant is a partnership, by a general partner.
(c) If the applicant is a sole proprietorship, by the proprietor.
(d) If the applicant is a municipality or public agency, by a principal executive officer or ranking elected official who is empowered to enter into contracts on behalf of the municipality or public agency.

19.031: Review of Applications for Completeness

(1) File Number. The Department shall assign a file number to each application when the application is filed with the Department. The file number shall be used in all subsequent correspondence between the Department and the applicant regarding the application and shall appear on any subsequent filings by the applicant.

(2) Completeness Review. The Department shall ~~notify the applicant in writing within 30 days of receipt of the application or such other time as may be established by superceding regulations as to whether the application is complete~~ initially determine whether each application is administratively complete. If an application is determined to be administratively incomplete the Department shall provide written notice to the applicant. The notification shall identify the deficiencies and specify the timeframe for the applicant to respond to the notification. Said notification shall not constitute a determination as to the technical adequacy of the application and shall comply with 310 CMR 4.00, if applicable. If the applicant does not respond within the timeframe specified by the notification and the applicable regulations then the Department may act on the application based on the existing information.

(3) Complete Applications. An application shall be deemed complete for the purposes of initiating the review process described at 310 CMR 19.032 through 19.036 or 310 CMR 19.037 when the Department receives the application and determines that all required information has been submitted, provided that the Department may require additional information at any time during the permit review period.

19.032: Procedure for Review of Applications for New Facilities or Major Expansions

(1) Applicability. The Department shall review applications submitted pursuant to 310 CMR 19.000, using either the permit review procedures set forth at 310 CMR 19.032 through 19.036 (draft permit review process) or the procedures set forth at 310 CMR 19.037 (provisional permit review process~~), except applications for permits submitted pursuant to 310 CMR 19.023: *Permit By Rule for Certain Existing Transfer Stations*~~. The draft permit review process set forth at 310 CMR 19.032 through 19.036 shall be used to review the following:
(a) ~~all new facility permit~~ applications for a new facility;
(b) applications for expansion of a combustion facility;
(c) applications for lateral expansion of a landfill;
(d) applications for vertical expansion of a landfill ~~when an Environmental Impact Report is required or ordered by the Secretary pursuant to 301 CMR 11.00~~;
(e) applications for expansion of a handling facility; and
(f) such other applications as the Department deems appropriate.

(2) Issuance of a Draft Permit.
(a) The Department shall prepare either a draft permit or draft denial. A draft permit shall

include all appropriate conditions, standards, and requirements necessary to establish a ~~new~~ facility or to conduct approved activities at an existing facility.

~~(b) If the Department decides to deny the facility a permit, it shall issue a draft denial.~~

(b) ~~(c)~~ Each draft ~~permit or draft denial~~ decision shall be accompanied by a fact sheet briefly describing:

1. the facility or activity which is the subject of the draft decision ~~permit~~;
2. the type and quantity of wastes which are to be handled;
3. the reasons for the terms and conditions set forth therein; and
4. the reasons why requested variances or alternatives to required standards are or are not proposed to be approved.

(3) Distribution of the Draft Decision ~~Permit or Denial~~. The Department shall send a copy of the draft ~~permit~~ decision ~~facility permit or denial~~ and the accompanying fact sheet to the applicant, the local board of health, abutting board of health, if any, and, on written request, to any other person.

(4) Description of Procedures. A description of the procedures for reaching a final decision on the ~~draft~~ permit application ~~or denial~~ shall accompany the copy of the draft decision ~~permit~~ and shall include:

(a) the beginning and ending dates of the comment period and the address where comments will be received;

(b) any other procedures by which the public may participate in the process leading to a final permit decision; and

(c) the name and telephone number of an individual to contact for additional information.

19.033: Public Notice for Facility Permit Actions

(1) Public Notice. The Department shall cause public notice to be given when:

(a) a draft denial of a facility permit application has been prepared ~~tentatively denied~~;

(b) a draft facility permit has been prepared; or

(c) a public hearing on a draft permit has been scheduled. Public notice in this case shall be given at least 21 days prior to the hearing date.

(2) Notice of More Than One Permit. Public notices may describe more than one permit or permit action.

(3) Comment Period. Public notices issued pursuant to 310 CMR 19.033(1) shall allow at least 30 days for public comment, except for notices pursuant to 310 CMR 19.033(1)(c). The comment period shall begin on the date the public notice is first published in a newspaper as specified at 310 CMR 19.033(4)(b) or on a later date specified in the public notice.

(4) Method of Notice. Public notice shall be given by the following methods:

(a) By mailing notice to:

1. the applicant;
2. the board of health of the city or town in which the facility is to be located or the permitted activity is proposed;
3. the board of health of any municipality within ½ mile of the proposed facility ("abutting board of health"); and

~~3.~~4. abutters of the facility site.

(b) By publication, paid for by the applicant, in a daily or weekly newspaper of general circulation in the locality affected by the facility.

(5) Content of Notice. All public notices, at a minimum, shall contain the following information:

(a) a description of the proposed facility including the type of facility, proposed tonnage, location and hours of operation;

(b) the identity and mailing address of the applicant;
(c) the public location where the application can be inspected; and
(d) either the time period for written comments on the application and the address to which comments should be mailed, and, if a public hearing is to be held, ~~or~~ the public hearing information set forth at 310 CMR 19.035.

19.034: The Comment Period

(1) Written Comments. During the public comment period provided for in 310 CMR 19.033(3) any interested person may submit written comments on the draft decision to the office of the Department processing the permit application request.

(2) Extending or Reopening the Public Comment Period. The Department may extend or reopen the public comment period prescribed in 310 CMR 19.033(3) to allow for the issuance of a modified draft decision ~~permit~~ or to give interested persons an opportunity to comment on the information or arguments submitted. If the Department gives such an extension, notice thereof shall be given in the manner prescribed in 310 CMR 19.033. Such notice shall specify any new issues to be considered.

19.035: Public Hearing

(1) Circumstances Requiring Hearing. The Department may ~~shall~~ schedule a public hearing within the community wherein the proposed facility is to be located when:
(a) the applicant requests a public hearing;
(b) the Commissioner determines that there is sufficient public interest in unresolved issues of concern; or
(c) the Department prepares a modified draft decision ~~permit~~ with substantial revisions from the original draft decision ~~permit~~ issued pursuant to 310 CMR 19.032(2) as a result of comments received pursuant to 310 CMR 19.034. Copies of the revised draft decision ~~permit~~ shall be distributed in accordance with 310 CMR 19.032(3).

(2) Content of Public Hearing Notice. Public notice of the public hearing shall be given in the manner described in 310 CMR 19.033 and shall include:
(a) the date, time, and place of the public hearing; and
(b) the nature and purpose of the public hearing.

(3) Public Hearing Procedures
(a) Hearing Officer. The Department shall designate a representative to conduct the public hearing. The Hearing Officer shall have authority to ensure an orderly presentation of issues, comments, data, and arguments, and to ensure an adequate and comprehensible record of the proceedings. The Hearing Officer may, at his or her discretion, without limitation of the foregoing:
1. define relevant issues, receive and consider relevant matter and exclude irrelevant or unduly repetitive matter;
2. determine the order in which persons wishing to do so may present oral comments;
3. conduct appropriate examination of persons offering oral comments;
4. establish a reasonable time limit for all persons wishing to offer oral comments;
5. require the applicant or any other person intending to present studies or exhibits for consideration at the hearing to file such material within a reasonable time in advance of the hearing;
6. require any person who refers to or relies upon written information or expert opinion in offering comments to provide copies of such material within a reasonable time after the hearing;
7. permit an opportunity for oral rebuttal of comments received;
8. allow a reasonable time after the hearing for providing written comment or rebuttal; and

9. order adjournment, recess, or rescheduling of the hearing.

(b) Participation in the Hearing. Any person may attend and observe the public hearing. Any person wishing to offer oral comments may do so upon filing a written statement containing the name, address, and telephone number of an authorized representative to whom correspondence may be addressed for purposes of the hearing.

(c) Authorized Representative. An individual may appear on his or her own behalf. A duly authorized officer or employee may represent a corporation; a duly authorized member may represent a partnership, joint venture or association; and an authorized trustee may represent a trust. Any person shall have the right to be accompanied, represented and advised by an authorized agent or attorney.

(d) Conduct of Hearings. Hearings shall be as informal as may be reasonable and appropriate under the circumstances. The Hearing Officer shall ensure that the conduct of persons at the hearing will at all times be orderly.

(e) Withdrawal of Request for Hearing. The applicant or any other person who requested a hearing may withdraw the request, or may elect to submit any comments or documents without a hearing, by filing with the Department a written withdrawal. If notice of a hearing has already been published pursuant to 310 CMR 19.033, such withdrawal must be filed at least ten days prior to the scheduled hearing, and notice of the withdrawal provided in the same manner specified in 310 CMR 19.033.

(f) Recordings and Transcripts. The proceedings at the hearing shall be recorded either electronically or stenographically. Transcripts or electronic copies shall be supplied to any person, upon request, at his or her own expense. Any person, upon request, may order a stenographer to transcribe the proceedings or the Department's electronic recording at his or her own expense. In such event, a stenographic record shall be provided to the Department at no expense to the Department, and upon such other terms as the Hearing Officer shall order.

19.036: Issuance of the Final ~~Permit~~ Decision on a Permit Application

(1) Issuance and Public Notice. After the close of the public comment period, or, if applicable, the close of the public hearing, whichever is later, the Department shall issue a final decision on the permit application. Notice of the Department's final decision and summary response to comments shall be given to the applicant, by first class mail. Notice shall also be provided to the board of health, any abutting board of health and each person who has requested notice of the final ~~permit~~ decision.

(2) Effective Date. Unless otherwise stated on the permit, the permit shall be effective upon issuance.

(3) Summary Response to Comments. At the time the ~~permit~~ decision is issued, the Department shall prepare a summary of the major comments on the draft decision ~~permit or denial~~ and a response and shall describe any major changes made to the draft decision ~~permit or denial~~ as a result of the public hearing.

(4) Legal Challenges.

(a) Appeal. Any person aggrieved by the issuance or denial of the permit or permit modification may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, § 150A and c. 30A not later than 30 days following the receipt of the final decision ~~permit~~. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the final decision ~~permit~~ by a court of competent jurisdiction, the final ~~permit~~ decision shall remain effective or become effective at the conclusion of the 30 day period.

(b) Notice of Action. Any aggrieved person intending to appeal a grant or denial of a permit to the Superior Court shall first provide notice of intention to commence such action. Said notices of intention shall include the Department file number and shall identify

with particularity the issues and reason why it is believed the permit decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office which processed the permit application at least five days prior to the filing of an appeal.

(c) No allegation shall be made in any judicial appeal of a permit decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in 310 CMR 19.000, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

19.037: Review Procedure for ~~Existing Facility Permits,~~ Permit Modifications, Permit Renewals and other Approvals

(1) Applicability. The ~~provisional~~ permit review process set forth at 310 CMR 19.037 shall be used to review the following:

(a) ~~an existing facility permit application filed pursuant to 310 CMR 19.021(3) or~~ a closure and ~~/~~post-closure plan ~~filed pursuant to 310 CMR 19.021(4);~~

(b) applications for modifications filed pursuant to 310 CMR 19.039 and 310 CMR 19.040, except expansions as described at 310 CMR 19.032(1);

(c) applications for post-closure use of a facility for purposes other than solid waste management;

(d) applications for authorizations to construct filed pursuant to 310 CMR 19.041; ~~or~~

(e) applications for authorizations to operate, and renewals thereof, filed pursuant to 310 CMR 19.042; and

(f) such other applications as the Department deems appropriate.

(2) Issuance and Public Notice. The Department shall mail a copy of its decision on an application to the applicant, the board of health of the city or town in which the facility is located, the board of health of any municipality within ½ mile of the proposed facility ("abutting board of health") and any other person who has requested in writing that the Department provide a copy of the decision.

(3) Effective Date. Unless otherwise stated in the permit or approval the decision shall be effective upon its issuance.

(4) Review of decision.

(a) Provisional decision. The Department may defer the effective date of a decision for the purpose of obtaining comments prior to a final decision. Such a provisional decision shall be accompanied by a notice stating that written comments may be submitted to the Department for a period of 21 days after the date of issuance of the provisional decision. Prior to the effective date established therein, the Department may rescind or modify the provisional decision by written notice.

(b) Where no provisional decision is issued, an applicant aggrieved by the Department's decision may within 21 days file a written request that the decision be deemed a provisional decision, and a written statement of the basis on which the applicant believes it is aggrieved, together with any supporting materials. Upon timely filing of such a request, the decision shall be deemed a provisional decision with an effective date 21 days after the Department's receipt of the request. Such a request shall reopen the administrative record, and the Department may rescind, supplement, modify, or reaffirm its decision. Failure by an applicant to exercise the right provided in 310 CMR 19.037(4)(b) shall constitute a waiver of the applicant's right to appeal.

(5) Legal Challenges.

(a) Appeal. Any person aggrieved by the issuance or denial of the permit, except as provided for under 310 CMR 19.037(4)(b), may file an appeal for judicial review of said

decision in accordance with the provisions of M.G.L. c. 111, § 150A and c. 30A. not later than 30 days following the receipt of the final permit. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the permit by a court of competent jurisdiction, the permit decision shall remain effective or become effective at the conclusion of the 30 day period.

(b) Notice of Action. Any aggrieved person intending to appeal a grant or denial of a permit to the Superior Court shall first provide notice of intention to commence such action. Said notices of intention shall include the Department file number and shall identify with particularity the issues and reason why it is believed the permit decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office which processed the permit application at least five days prior to the filing of an appeal.

(c) No allegation shall be made in any judicial appeal of a permit decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in these regulations, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

19.038: Applicability and Review Criteria ~~for Review of Applications~~ for a Permit or Permit Modification

(1) Applicability of Permitting Criteria. The criteria the Department shall apply when reviewing permit applications (e.g., landfills, combustion facilities, handling facilities, post-closure use) for Authorizations to Construct (ATCs) under 310 CMR 19.041, or permit modifications, are specified below. Where an applicant has previously conducted an analysis to address a criterion during the site assignment process for the area under consideration for the permit, and that was approved by DEP, the Department will not require an additional analysis for the permit application unless conditions have changed significantly. If an analysis has not previously been completed and approved for the area under consideration for the permit then an analysis must be completed for the permit application.

(a) New or Expanding Landfills. Permits for new landfills or landfill expansions shall comply with criteria at 310 CMR 19.038(2)(a), (c), (d) and (e).

(b) Other Modifications of Landfills. Permits for modifications of landfills not subject to 310 CMR 19.038(1)(a) shall comply with the criteria at 310 CMR 19.038(2)(a)1-12. , (d) and (e).

(c) New or Expanding Combustion Facilities. Permits for new or expanding combustion facilities shall comply with the criteria at 310 CMR 19.038(2)(a),(b) and (e).

(d) Other Modifications of Combustion Facility Operations. Permits for modifications of combustion facilities not subject to 310 CMR 19.038(1)(c) shall comply with the criteria at 310 CMR 19.038(2)(a)1-12. and (e).

(e) New or Expanding Handling Facilities. Permits for new or expanding handling facilities shall comply with the criteria at 310 CMR 19.038(2)(a), (b) and (e).

(f) Other Modifications of Handling Facility Operations. Permits for modifications of handling facilities not subject to 310 CMR 19.038(1)(e) shall comply with the criteria at 310 CMR 19.038(2)(a)1-12. and (e).

(g) Post-Closure Use. Permits for the post-closure use of a facility for purposes other than use as a solid waste management facility shall comply with the criteria at 310 CMR 19.038(2)(a)1, 3, 4, 7, 9, and 11.

~~(1) Applicability of Criteria. The criteria the Department shall apply when evaluating various applications are specified below.~~

~~(a) Landfills. The criteria to be applied to applications for landfills are as follows:~~

~~1. New Landfills. New landfills shall comply with the criteria at 310 CMR 19.038(2)(a), (c) and (d).~~

~~2. Existing Landfills – Current Operations. For purposes of permit applications filed pursuant to 310 CMR 19.021(3), current operations at existing landfills shall comply~~

with the criteria at 310 CMR 19.038(2)(a)1. through 10. and (d).

3. Landfill Expansions Requiring an EIR. A lateral or vertical expansion of a landfill requiring the submission or revision of an Environmental Impact Report in accordance with 301 CMR 11.00 shall comply with the criteria at 310 CMR 19.038(2)(a), (c) and (d).

4. Landfill Expansions Not Requiring an EIR. Lateral or vertical expansions that are not subject to 310 CMR 19.038(1)(a)3., shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10., (c) and (d), except:

a. a lateral expansion of an existing landfill which results in closure of the facility within two years from the date of commencement of operations in the expansion area shall not be required to meet the recycling criteria set forth at 310 CMR 19.038(2)(d);

b. a vertical expansion of an existing landfill which is integral to the proper closure of the facility (*i.e.* necessary to establish proper grades and elevations) shall, at the discretion of the Department, not be required to meet all the setback criteria and recycling criteria set forth at 310 CMR 19.038(2)(c) and (d), respectively; and

c. a vertical expansion of an existing landfill which results in closure of the facility within two years shall, at the discretion of the Department, be required only to comply with the criteria at 310 CMR 19.038(2)(a)1. through 10. and (c)1. through 4.

5. Other Landfill Modifications. Modifications to landfill permits or plans not subject to 310 CMR 19.038(1)(a)1. through 4. shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10.

(b) Combustion Facilities. The criteria that apply to combustion facility applications are as follows:

1. New Combustion Facilities. New combustion facilities shall comply with the criteria at 310 CMR 19.038(2)(a), (b) and (d).

2. Existing Combustion Facility Current Operations. For purposes of permit applications filed pursuant to 310 CMR 19.021(3), current operations at existing combustion facilities shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10. and (d).

3. Expansion of Combustion Facility Capacity Requiring an EIR. Expansion of the capacity of a combustion facility when the proposed expansion requires the submission or revision of an Environmental Impact Report in accordance with 301 CMR 11.00, shall comply with the criteria at 310 CMR 19.038(2)(a), (b) and (d).

4. Other Modifications of Combustion Facility Operations. Modifications of the operations of a combustion facility that are not subject to 310 CMR 19.038(1)(b)1. through 3. shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10.

(c) Handling Facilities. The criteria that apply to handling facility applications are as follows:

1. New Handling Facilities. New handling facilities shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10. and (b).

2. Existing Handling Facility Current Operations. For purposes of permit applications filed pursuant to 310 CMR 19.021(3), current operations at existing handling facilities shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10.

3. Expansion of Handling Facility Capacity Requiring an EIR. Expansion of the capacity of a handling facility, when the proposed expansion requires the submission or revision of an Environmental Impact Report in accordance with 301 CMR 11.00, shall comply with the criteria at 310 CMR 19.038(2)(a) and (b).

4. Other Modifications of Handling Facility Operations. Modifications of the operations of a handling facility that are not subject to 310 CMR 19.038(1)(c)1. through 3. shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 10.

(d) Post-Closure Use. The post-closure use of a facility for purposes other than use as a solid waste management facility shall comply with the criteria at 310 CMR 19.038(2)(a)1. through 5., 7. and 9.

(2) Criteria for Review of Applications for a Permit or Permit Modification.

(a) General Criteria. In accordance with the provisions of 310 CMR 19.038(1) the Department shall consider the following criteria in reviewing an application for a permit or permit modification:

1. the applicant has received certification from the Secretary of Environmental Affairs that the applicant has complied with the Massachusetts Environmental Policy Act (MEPA) process;

2. the facility is located within the boundaries of a valid site assignment and is proposed to be constructed, operated and maintained in accordance with the terms and conditions of that site assignment;

3. the design, construction, operation, and maintenance of the facility and its environmental monitoring systems are ~~shall be accomplished~~ in compliance with requirements set forth in 310 CMR 19.000, and such policies as the Department establishes governing solid waste management facilities;

4. the design, construction, operation, and maintenance of the facility constitutes a threat to the public health, safety or the environment or results in nuisance conditions;

5. whether the projected impacts of the proposed facility pose a threat to public health, safety or the environment, taking into consideration the impacts of existing sources of pollution or contamination as defined by the Department, and whether the proposed facility will mitigate or reduce those sources of pollution or contamination;

6. on a site on which the Department determines it infeasible to adequately conduct appropriate environmental monitoring, no leachate or contaminated surface run off shall enter ground or surface waters; **[Moved from 19.038(2)(b)]**

7. ~~5~~. the facility design and operation includes components and measures which will assure compliance with other applicable state and federal laws, regulations and policies, including without limitation, 314 CMR 3.00 through 12.00 (water pollution control); 310 CMR 22.00 and 27.00 (water supply); 310 CMR 7.00 (air quality); and 40 CFR 257 and 258 as may be amended;

8. ~~6~~. the facility is ~~shall be~~ in compliance with the waste ~~bans~~ disposal restrictions established ~~under~~ at 310 CMR 19.017;

9. ~~7~~. violations of applicable statutes and regulations, judicial orders or administrative order or conditions of a prior plan approval/permit issued by the Department are corrected, and any fines and penalties associated with any of the above, which are related to the site or facility have been paid or are pending administrative or judicial appeal;

10. ~~8~~. the construction, operation and maintenance of the facility ~~does not~~ represents a bird hazard;

11. ~~9~~. the ground support for the structural components of the facility is adequate;

12. ~~10~~. whether the construction, operation, and maintenance of the facility:

a. will have an adverse impact on Endangered, Threatened, or Special Concern species listed by the Natural Heritage and Endangered Species Program of the Division of Fisheries and Wildlife in its database;

b. will have an adverse impact on an Ecologically Significant Natural Community as documented by the Natural Heritage and Endangered Species Program in its database; or

c. will have an adverse impact on the wildlife habitat of any state Wildlife Management Area.

~~10. the construction, operation, or maintenance of the facility will not cause or contribute to the taking of any endangered or threatened species of plants, fish or wildlife as identified in 50 CFR Part 17;~~

13. ~~11~~. the yearly and lifetime capacity potentially created by the proposed facility or expansion in relation to the reasonably anticipated disposal capacity

requirements and reduction/diversion goals of the Commonwealth and the geographic area(s) which the site will serve;

14. ~~12.~~ the extent to which the facility operations, alone or in conjunction with other facilities, maximizes diversion or processing of each component of the anticipated waste stream in order to first reduce adverse impacts and utilize materials and only thereafter to extract energy from the remaining solid waste prior to final disposal; and

15. ~~13.~~ the extent to which the facility operations, alone or in conjunction with other facilities, will contribute to the establishment and maintenance of a statewide integrated solid waste management system which will protect the public health and environment and conserve the natural resources of the Commonwealth.

(b) Combustion Facilities and Handling Facilities. In addition to the criteria set forth under 310 CMR 19.038(2)(a), the Department shall consider whether the following criteria, in reviewing an application for a permit or permit modification for combustion facilities and handling facilities, have been met for facilities or expansions of facilities that were site assigned or had submitted an Administratively Complete site suitability report application to the Department before June 8, 2001:

1. the construction, operation and maintenance of the facility, if located or proposed to be located in a Zone II area or Interim Wellhead Protection Area ~~shall not~~ does not result in an adverse impact to an existing or potential public or private water supply well;

~~2. on a site on which the Department determines it infeasible to adequately conduct appropriate environmental monitoring, no leachate or contaminated surface run off willshall enter ground or surface waters;~~ **[Moved to General Criteria]**

2. ~~3~~. the waste handling areas are ~~shall~~ not ~~be~~ within the following distances unless, as applicable, a waiver has been obtained under 310 CMR 16.00 or a variance is obtained under 310 CMR 19.080:

a. 100 feet of the nearest edge of the property boundary, provided that a shorter distance consistent with the necessary operating and maintenance requirements of the facility may be approved for that portion of the waste handling area which borders a solid waste management facility;

b. 250 feet of an existing or potential private water supply well;

c. 250 feet of an occupied residential dwelling, prison, bedded health care facility, lower educational institution or children's pre-school, excluding equipment storage or maintenance structures, if a solid waste handling facility, and 500 feet if a solid waste combustion facility;

d. a resource area protected by the Wetlands Protection Act, M.G.L. c. 131, § 40, and the regulations promulgated thereunder at 310 CMR 10.00, including the 100 year floodplain;

e. 500 feet upgradient or 250 feet downgradient of a surface drinking water supply.

(c) Landfills. In addition to the criteria set forth under 310 CMR 19.038(2)(a) the Department shall consider whether the following criteria, in reviewing an application for a permit or permit modification for a landfill, have been met for facilities or expansions of facilities that were site assigned or had submitted an Administratively Complete site suitability report application to the Department before June 8, 2001:

1. the landfill is not located:

a. in the Zone II area of an existing or potential public water supply well;

b. within 15,000 feet upgradient of an existing public water supply well unless a preliminary Zone II determination has been completed and approved by the Department and the Department determines that the landfill is not located in the Zone II area;

c. in the Interim Wellhead Protection Area of an existing or potential public water supply well, unless a preliminary Zone II delineation has been approved by the Department and the Department determines that the landfill is not located in

the Zone II area;

d. in the recharge area for a sole source aquifer, unless:

i. there are no existing or potential public ground water supplies downgradient of the site;

ii. there are no existing or potential private ground water supplies downgradient of the site; however, the applicant may have the option of providing an alternative public water supply to replace all the existing or potential downgradient private groundwater supplies; and

iii. there is a sufficient existing or potential public water supply to meet the municipality's projected needs.

~~2. the landfill is not located on a site on which the Department determines it infeasible to adequately conduct appropriate environmental monitoring;~~ **[Moved to General Criteria]**

~~3. the landfill does not represent a threat to public health, safety or the environment due to concentration or migration of explosive gases, excluding gas control or recovery system components, at the facility or beyond the facility property boundary;~~ **[Moved to Additional Landfill Criteria]**

4. the leachate containment structure of a landfill shall not be located within a resource area protected by the Wetlands Protection Act, M.G.L. c. 131, § 40, including the 100 year floodplain;

5. the outermost limits of the waste deposition area for new landfills or expansions of landfills shall not be within the following distances unless, as applicable, a waiver has been obtained under 310 CMR 16.00 or a variance has been obtained under 310 CMR 19.080:

a. 100 feet of the nearest edge of the property boundary, provided that a shorter distance consistent with the necessary operating and maintenance requirements of the facility may be approved for that portion of the waste deposition area which borders a solid waste management facility;

b. 500 feet of a private water supply well;

c. 500 feet of an occupied residential dwelling, bedded health care facility, prison or lower educational institution or children's pre-school, excluding equipment storage or maintenance structures;

d. a resource area protected by the Wetlands Protection Act, M.G.L. c. 131, § 40, and the regulations promulgated thereunder at 310 CMR 10.00, including the 100 year floodplain;

e. 2500 feet upgradient or 500 feet downgradient of a surface drinking water supply;

f. 250 feet upgradient of a perennial watercourse that drains to a surface drinking water supply where the landfill is within one mile of the surface drinking water supply; or

g. 250 feet of a lake, pond or river (not including a stream) as defined in 310 CMR 10.00, other than a drinking water supply.

~~h. 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates that an alternative setback of less than 200 feet will prevent damage to the structural integrity of the landfill;~~ **[Moved to Additional Landfill Criteria]**

~~6. the landfill is not located in a seismic impact zone unless all containment structures are designed to resist the maximum horizontal acceleration in lithified earth material for the site; and~~ **[Moved to Additional Landfill Criteria]**

~~7. the landfill is not located in an unstable area unless engineering measures have been incorporated into the landfill's design to ensure the integrity of structural components, including but not limited to liners, leachate collection systems and final covers, will not be disrupted. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:~~

~~a. on-site or local soil conditions that may result in significant differential settling;~~

~~b. on-site or local geologic or geomorphologic features; and~~
~~c. on-site or local human-made features or events (both surface and subsurface).~~
[Moved to Additional Landfill Criteria]

(d) Additional Landfill Criteria. In addition to the criteria set forth at 310 CMR 19.038(2)(a) and (c), the Department shall consider whether the following criteria, in reviewing an application for a permit or permit modification for a landfill, have been met:

1. the landfill does not represent a threat to public health, safety or the environment due to concentration or migration of explosive gases, excluding gas control or recovery system components, at the facility or beyond the facility property boundary;

2. the landfill is not located in a seismic impact zone unless all containment structures are designed to resist the maximum horizontal acceleration in lithified earth material for the site;

3. the landfill is not located in an unstable area unless engineering measures have been incorporated into the landfill's design to ensure the integrity of structural components, including but not limited to liners, leachate collection systems and final covers, will not be disrupted. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

   a. on-site or local soil conditions that may result in significant differential settling;

   b. on-site or local geologic or geomorphologic features; and

   c. on-site or local human-made features or events (both surface and subsurface); and

4. the landfill is not located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates that an alternative setback of less than 200 feet will prevent damage to the structural integrity of the landfill.

(e) ~~(d)~~ Recycling Criteria. In addition to the criteria set forth in 310 CMR 19.038(2)(a) through (c) no permit for a landfill, ~~or~~ combustion facility ~~(excluding infectious waste incinerators),~~ or handling facility handling ~~and~~ or disposing of municipal solid wastes or construction and demolition wastes shall be issued unless the facility provides for recycling and/or composting as follows:

1. the proposed facility design and operation plans incorporate means by which the facility will recycle or compost or provide the opportunity to recycle or compost a minimum of 25% by weight of the average yearly amount of solid waste the facility is approved to accept for disposal.

2. The 25% recycling or composting requirement may be met by any combination of the following activities:

   i. recycling or composting will take place at the applicant's facility;

   ii. recycling or composting of contracted waste will take place at a recycling or composting facility located at a different site;

   iii. a demonstration by the applicant or its waste source that recyclable or compostable materials are being diverted by a generator or intermediate handler and are being recycled or composted prior to the waste being delivered to the applicant's facility; or

   iv. the applicant will provide the opportunity to recycle or compost.

3. The 25% recycling requirement may be reduced, deferred or suspended in whole or in part where the applicant demonstrates that for reasons beyond its control it is not feasible to meet the 25% requirement when facility operations are projected to commence or during a part of its operating life. In determining feasibility the Department may consider, without limitation, the effect of the recycling requirement on the applicant's existing waste disposal contracts, financial obligations which pre-dated these regulations, implementation costs at municipally owned facilities and the availability of non-disposal alternatives.

4. The Department may limit the percentage an applicant can claim toward the 25% recycling requirement for recycling of non-post consumer recyclables.

19.039: Applicant's Request to Modify a Permit

(1) General . An owner or operator seeking to alter or change a permit or the Department approved design, operation and maintenance procedures or closure/post-closure design of a facility, including any conditions imposed in the permit, shall apply to the Department for approval to modify the permit in accordance with 310 CMR 19.039.

(2) Types of Modification . Acts including but not limited to the following constitute modifications to which 310 CMR 19.039 applies:

(a) expansions of solid waste management facilities;
(b) acceptance of solid waste in excess of permitted capacity or tonnage limits;
(c) alteration of the original design and operation of the facility; and
(d) any other deviation, including post-closure use, from the construction, operation and maintenance of the facility required by the permit.

(3) Application . An application for modification of a permit shall include all or part of the plan components set forth in 310 CMR 19.030(3)(c) as the Department deems necessary to evaluate the feasibility and potential impact of the proposed modifications on the public health, safety or the environment.

(4) Filings . An application for modification shall be submitted to the Department in accordance with 310 CMR 19.030.

(5) Review Procedure . Except as may be allowed in accordance with 310 CMR 19.039(6), the Department shall review and issue a decision on whether to allow a modification to a permit in accordance with the provisions of:

(a) the Draft Permit Process, 310 CMR 19.032 through 19.036, for modifications described at 310 CMR 19.032 or
(b) the Provisional Permit Process, 310 CMR 19.037, as applicable for other modifications.

(6) Alternative Review Process for Certain Modifications . The Department may, in accordance with permit conditions established pursuant to 310 CMR 19.043 or guidelines established by the Department, determine that certain modifications to facility plans may be effected without prior written approval, as provided below:

(a) at least 30 days prior to commencing such modification the permittee shall notify the Department and the board of health in writing of the planned modification; and
(b) within 30 days of completion of the modification the permittee shall submit to the Department as-built plans and/or a report describing the modification.

19.043: Conditions for Permits and Authorizations

(5) Standard Conditions . The following conditions shall apply to all owners, operators or permittees (hereinafter comprehensively referred to as "permittee":

(i) Duty to Inform . The permittee shall have a continuing duty to immediately:

1. correct any incorrect facts in an application;
2. report or provide to the Department any omitted facts which should have been submitted to the Department at any time;
3. report to the Department, in advance, each planned change in the facility or activity which might result in non-compliance with a term or condition or a permit or approval; ~~and~~
4. report to the Department each change in the information listed in the application filed pursuant to 310 CMR 19.030;

5. report any emergency condition (such as a fire); and
6. notify the Department of any change in the permittee's name or mailing address.

19.044: Transfer of Permits

(1) General . No sale, assignment, or transfer of the rights or privileges, or effective control of such rights or privileges, granted under a permit to establish, expand, construct, operate or maintain a facility shall be valid unless:

(a) pursuant to M.G.L. c. 111, § 150A, notice that the facility was operated has been recorded in the registry of deeds, or if the site is registered land, in the registry section of the land court for the district wherein the land lies;

(b) the transferor notifies the Commissioner and the appropriate Department Regional Office at least fourteen ~~within seven~~ days prior to ~~of~~ the date of transfer;

(c) the agreement provides that the transferee is responsible to correct any and all conditions at the site or facility which result in a threat to public health, safety or the environment or constitute violations of the site assignment, laws, regulations or conditions of the permit, approvals, or authorizations existing at the time of transfer whether or not such conditions are the subject of a Department enforcement action prior to the date of the transfer. A transfer of a permit shall not relieve previous owners of liability for the site under M.G.L. c. 21E or c. 21H; and

(d) the transferee has obtained financial assurance as required under 310 CMR 19.051. Where financial assurance is required no transferee shall operate without said financial assurance.

III. MODIFICATIONS TO THE BENEFICIAL USE DETERMINATION REGULATIONS

~~19.060: Beneficial Use of Solid Wastes~~

~~(1) Applicability. No person shall make beneficial use of a solid waste material unless they obtain a prior written determination of beneficial use from the Department.~~

~~(2) Submittal Requirements. An application for a beneficial use determination shall be submitted to the appropriate Regional Office and a copy of the application shall be filed with the board of health of jurisdiction unless the Department determines that the proposed use is not limited to a specific location and therefore it is not practical to identify the board of health of jurisdiction. The application shall be filed on a form as may be supplied by the Department and contain the following information:~~

~~(a) chemical and physical characterization of the discarded material;~~
~~(b) identification of the quantity, quality and source of the material;~~
~~(c) the proposed method of handling and utilization of the material;~~
~~(d) a description of how the proposed utilization will result in a viable and beneficial substitution of a discarded material for a commercial product or commodity;~~
~~(e) a demonstration that the proposed methods of handling and storing the discarded material will not adversely affect the public health, safety or the environment; and~~
~~(f) a demonstration that the proposed utilization or end-products will not adversely affect the public health, safety or the environment.~~

~~(3) Board of Health Comments. The Department shall accept comments from the board of health regarding the application for a period not less than 21 days before issuing a final determination, unless the Department has determined in accordance with 310 CMR 19.060(2) that a copy of the application was not required to be sent to a board of health.~~

~~(4) Department Determination of Beneficial Use. The Department shall not make a positive determination of beneficial use unless the applicant affirmatively demonstrates that:~~

~~(a) the application is accurate and complete;~~

~~(b) the material will not be handled or utilized in a manner which will result in the material becoming a solid waste;~~
~~(c) the identified material can be feasibly processed and put to beneficial use under the proposal set forth in the application;~~
~~(d) the proposed project can be successfully completed in compliance with appropriate rules and regulations;~~
~~(e) any mixing of different types of material, if applicable, improves the usefulness of the material; and~~
~~(f) the proposed operation and beneficial use will not cause or threaten to cause an adverse impact.~~

~~(5) Effect of Determinations. A determination of beneficial use means the material is not classified as a solid waste only when used in accordance with the Department's determination of beneficial use. Where the processing of material is necessary for its beneficial use the processing activity shall be subject to the provisions of 310 CMR 16.00 where it occurs at a location other than the site of beneficial use. Where the processing occur at the site of beneficial use the Department shall determine the conditions and degree of processing applicable to the particular use.~~

NOTE: THE ENTIRE BENEFICIAL USE DETERMINATION REGULATION IS NEW. THEREFORE THIS SECTION DOES NOT USE DOUBLE UNDERLINE OR STRIKEOUT TO HIGHLIGHT MODIFIED TEXT.

310 CMR 19.060: Beneficial Use of Secondary Materials

(1) Summary: This subsection establishes the Department's rules for the beneficial use of secondary materials. Included in this subsection are general standards and permit procedures for beneficial use activities. In order to identify specific standards and permit procedures, uses of secondary materials are divided into four categories:

(a) Category 1 - Commercial Products;
(b) Category 2 - Regulated Systems;
(c) Category 3 - Restricted Applications; and,
(d) Category 4 - Unrestricted Applications.

(2) Determination of Applicability.

(a) Any person who desires a determination whether 310 CMR 19.060 applies to a facility or operation that stores, processes or uses a secondary material may submit to the Department a request for a determination of applicability. The applicant shall provide the following forms and information to the Department:

1. Submit a Request for Determination of Applicability to the Department using the appropriate forms provided by the Department.
2. Provide a detailed description of the facility that will store, process, or otherwise handle the secondary material. In the case of a manufacturing facility, a general description of the facility's manufacturing system shall be submitted, including process flow diagrams. The complexity and degree of detail of the description will vary depending on the magnitude and complexity of the process.
3. Describe the feedstock or product the secondary material is replacing.
4. Provide a detailed description of similar products currently and historically produced by the facility.
5. Provide a characterization of the secondary material. The scope of the characterization shall be sufficient for the Department to adequately determine adverse impacts and risks to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts. This shall include:

a. A physical characterization of the secondary material including, but not limited to, matrix and gradation, where applicable.
b. Chemical characterization of the secondary material including the

results of analytical testing for those hazardous materials that reasonably may be thought to be present.

6. Describe any previous licenses, permits, authorizations, or other approvals for recycling or beneficial use of the material.

(b) The Department shall issue a determination of applicability within 45 days of the receipt of the request.

(3) Processing of Secondary Materials. When the processing of a secondary material is necessary for its beneficial use the Department shall determine the type and amount of processing allowable which does not constitute a solid waste processing activity. If the Department determines that processing of the secondary material constitutes a solid waste processing activity then the processing shall be subject to the provisions of 310 CMR 16.00 and 19.000.

(4) General Application Requirements. A copy of the beneficial use permit application shall be filed with the board of health of jurisdiction when the proposed use is limited to a specific location. The application shall be filed on a form supplied by the Department and contain the following information as determined or modified at the pre-application meeting where a pre-application meeting has been held. Items (a) through (i) must be included as part of the pre-application package. The final permit application package must include the data as required in (j):

(a) A description of the secondary material and its proposed use;

(b) A description of how the proposed utilization will result in a viable and beneficial substitution for a commercial product or commodity;

(c) A detailed physical and chemical characterization plan of both the secondary material proposed for beneficial use and of the final product including:

1. A detailed list of the chemical constituents found in the product(s) from which the waste is derived;

2. A statistically valid, representative sampling plan consistent with guidance in "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods," SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460, and other applicable guidance as may be stipulated by the Department. The sampling plan shall include all hazardous materials including Critical Contaminants of Concern (CCCs) that reasonably may be thought to be present in the secondary material. CCCs shall be separately listed.

3. A quality assurance and quality control plan, ensuring that appropriate procedures are followed and documented, using guidance contained in EPA/600/R-02/009, December 2002, Guidance on Quality Assurance Project Plans and other applicable guidance as may be required by the Department.

(d) A detailed description of the proposed facility that stores, processes, or otherwise handles the secondary material. In the case of a manufacturing facility, a general description of the facility's manufacturing system related to the proposed use of secondary material shall be submitted, including process flow diagrams. The complexity and degree of detail of the description will vary depending on the magnitude and complexity of the process generating the secondary material. Any interim handling facilities or collection centers not located at the site of processing and not otherwise approved to store or handle the secondary material pursuant to 310 CMR 16.00 and 19.000 shall be identified and described pursuant to this section;

(e) Information indicating the annual quantities, by weight and/or volume, of the secondary material proposed for beneficial use;

(f) A description of any risk management techniques being considered, including any deed or other use limitations, location restrictions, best management practices or engineering controls;

(g) Identification of the proposed location of use, if applicable, or types of locations where the secondary material will be used (e.g. highway rights-of-way, industrial zoned properties, etc.);

(h) Identification of storage requirements necessary for maintaining sufficient inventory to meet market demand;

(i) If hazardous materials, including CCCs, are identified during the pre-application or application process the project proponent shall prepare and submit a Toxics Reduction Plan

(TRP) that details options to minimize the concentration of hazardous material that could result in significant increases to environmental concentrations. The TRP shall document steps that will be taken to implement economically and technologically feasible options; and,

(j) Submission of all appropriate data derived from the sampling plan required in accordance with 310 CMR 19.060 (4)(c)3. The Applicant must include a statistically valid analysis of the concentration and distribution of all hazardous materials that may be contained in the secondary material.

(5) Demonstration Projects. The Department may grant temporary approval for a pilot project or demonstration project pursuant to 19.062, Demonstration Projects or Facilities. The application requirements will be determined on a case-by-case basis.

(6) Record Keeping. For permitted, on-going beneficial use activities, the permittee shall maintain records and shall submit reports to the Department as required in the permittee's Beneficial Use Determination permit. Reporting should summarize beneficial use activities during the past year, including the quantity of secondary material received or distributed for beneficial use, the sources of the secondary material received, and the results of any required testing or on-going characterization and any other information required as a condition of the permit.

(7) Public Participation. The Department shall accept comments from Boards of Health and other interested parties regarding the application for a period not less than 21 days before issuing a final determination.

(8) Generic Beneficial Use Determinations. The Department may issue generic beneficial use determinations, as general permits, that apply to a specific beneficial use of a secondary material, providing the reuse complies with the Reuse Criteria listed in 310 CMR 19.060(12). Any person or entity may use the secondary material as identified in the generic beneficial use determination as long as the person or entity adheres to the requirements and conditions contained therein.

(9) Effect of Determinations. A determination of beneficial use means the material is not classified as a solid waste only when used in accordance with the Department's determination of beneficial use.

(10) Pre-Application.

(a) Applicants for a Beneficial Use Determination may request a pre-application meeting with the Department, the purpose of which is for the Applicant to describe the proposed beneficial use activity and obtain guidance on the application process from the Department.

(b) The Applicant shall submit general application information, as described in General Application Requirements, 310 CMR 19.060(4), to the Department at least 10 business days prior to the pre-application meeting. Information submitted for purposes of pre-application shall be sufficient to assign the application to the appropriate beneficial use category as described in section 310 CMR 19.060(12) through (15).

(11) General Standards.

(a) If the applicant intends to use the secondary material as a substitute for a raw material in manufacturing, the secondary material shall conform to industry specifications for the raw material it is replacing or impart properties that result in the product meeting applicable industry performance specifications.

(b) If the applicant intends to use the secondary material as a product, it shall meet or exceed the applicable industry-accepted specifications or performance standards for that product.

(c) In lieu of established industry-accepted specifications or performance standards as identified in sections 310 CMR 19.060(11)(a) and (b), any mixing of secondary materials with other materials, if applicable, to produce a product must contribute to the usefulness of the product.

(d) Any proposed processing and beneficial use shall not cause an adverse impact or significant risk to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts. All beneficial use applications must demonstrate that the proposed reuse meets all of the criteria identified in 310 CMR 19.060(12), Reuse Criteria.

(f) The secondary material will not be handled or utilized in a manner that will result in the material becoming a solid waste;

(g) The proposed beneficial use can be successfully completed in compliance with applicable rules and regulations.

(12) Reuse Criteria

(a) No significant risk to public health may be created.

(b) No significant adverse environmental impacts may be created.

(c) No condition may be created that adversely impacts public welfare or safety.

(d) Reuse may not result in increases in the environmental concentrations of any critical contaminants of concern (CCCs), including persistent, bioaccumulative toxins (PBT) and other priority chemical pollutants as may be identified by the Department.

(e) Reuse must be in compliance with all applicable standards and guidelines as specified by the Department.

(13) Category 1 -- Use of Secondary Materials in Commercial Products.

(a) Applicability. Products manufactured from secondary materials or secondary materials that are directly used as products are considered commercial products when: the product is used in a manner that is consistent with industry accepted product specifications or performance standards; and is controlled and managed throughout its lifecycle in a manner that effectively limits potential for illegal or inadvertent disposal or releases of hazardous material to the environment and exposure to people. Products intended for uncontrolled land-application may not be reviewed in accordance with this category. Additionally, adverse impact or significant risk to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts can be evaluated by demonstrating compliance with the reuse criteria as outlined at 310 CMR 19.060(12)(b).

(b) Demonstrating Compliance With the Reuse Criteria. The use and processing of the secondary material must comply with the Reuse Criteria specified in CMR 19.060(12). This determination shall be based upon a comparative analysis of the product manufactured using the secondary material as compared to the traditionally used feedstock or product it is replacing. If the nature and concentration of hazardous materials, including CCCs, are comparable, further assessment will not be required. Uses of secondary material that reasonably may be anticipated to increase risks to public health, safety and the environment, above that of the traditional feedstock or the product in the same application, cannot be reviewed in accordance with this subsection.

(c) Application Requirements. In addition to the general application requirements cited at 310 CMR 19.060(4), the applicant shall submit the following information:

1. A physical characterization of the commercial product;
2. A list of constituents (including hazardous materials) contained in the product manufactured using traditional materials or products;
3. A comparative analysis of the product manufactured using the secondary material versus the traditionally used material it is replacing for the following:
    a. Hazardous materials, including CCCs (on a weight and concentration basis);
    b. Processing required for use;
    c. Actual use, including, but not limited to, storage and handling prior to the actual use;
    d. Location(s) used; and,
    e. Management or processing during its lifecycle, including, but not limited to, any destructive practices that reasonably may be expected to be employed in recycling or disposing of the material;

(14) Category 2 -- Use of Secondary Materials in Regulated Systems.

(a) Applicability. Beneficial use of secondary materials at facilities permitted, approved or ordered by the Department shall be deemed adequately regulated for purposes of 310 CMR 19.000, provided the person does so in compliance with the terms and conditions of any such permit, order or approval and the following:

1. Any aspect of the use of secondary materials not covered by the permit, order, or approval shall be reviewed in accordance with M.G.L. c. 111, § 150A, 310 CMR 19.000, and 310 CMR 16.00;
2. The storage, transfer, processing, treatment, use and disposal of the secondary material shall be achieved using best management practices that

prevent adverse impacts and significant risks to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts.

(b) Demonstrating Compliance With the Reuse Criteria. Compliance with the Reuse Criteria can be demonstrated by meeting appropriate numerical standards, risk management criteria and other applicable requirements as identified by the Department.

(c) Application Requirements. In addition to the general application requirements cited at 310 CMR 19.060(4), the applicant shall provide sufficient information to evaluate the potential for significant risks from the storage, transfer, processing, treatment activities, use and final disposal of the secondary material not governed by the existing approval.

(15) Category 3 -- Use of Secondary Materials in Restricted Applications.

(a) Applicability. Secondary materials that are beneficially used in applications that utilize risk management techniques in order to prevent adverse impact or significant risks to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts shall be reviewed in accordance with this section.

(b) Demonstrating Compliance With the Reuse Criteria. Compliance with the Reuse Criteria can be achieved by demonstrating that release and exposure pathways are adequately controlled through the use of risk management procedures (e.g. engineering controls; use limitations, etc.) If adequate control of such pathways cannot be demonstrated, a reuse specific assessment is required, as described below. Compliance with the Reuse Criteria has been achieved if no concentration of any hazardous material is greater than the Upper Concentration Limit as described in 310 CMR 40.0996 and conditions specified in either 310 CMR 19.060(15)(b)1. or 2. are met:

1. The concentrations of all hazardous materials are at or below background, as determined by a statistically valid and appropriate background concentration sample data set of Massachusetts soils; or,

2. No concentration of a Hazardous Material contained in, or release resulting from the use of, a secondary material, as appropriate, exceeds acceptable limits as demonstrated using one of the following approaches:

a. Numerical Standards Approach. Hazardous material concentrations may not exceed applicable standards and guidelines as stipulated by DEP. If an appropriate DEP standard or guideline does not exist for all constituents in all relevant media, then a guideline may be proposed by the applicant developed using protocols consistent with those used in the derivation of existing DEP standards and guidelines for that medium. In addition to the standards and guidelines, the applicant shall demonstrate that the reuse will not lead to exceedences of the Massachusetts Drinking Water Quality Standards at 310 CMR 22.00; Massachusetts Air Quality Standards at 310 CMR 7.00; Massachusetts Contingency Plan Method 1 Standards at 310 CMR 40.0970; and, Massachusetts Surface Water Quality Standards at 314 CMR 4.00.

b. Total Waste Reuse Risk Approach. Using this approach, Total Waste Reuse cancer and non-cancer risks must be determined as follows:

i. Total cancer risks and non-cancer risks shall be calculated for all appropriate exposure pathways and receptors.

ii. The assessment shall be performed in a manner consistent with scientifically acceptable risk assessment practices as detailed in guidance published by the Department.

iii. A condition of no significant risk to human health has been achieved if:

(1.) No Exposure Point Concentration of any hazardous material is greater than applicable public health or environmental standards; and,

(2.) Total Waste Reuse Risk (the aggregate risk attributable to all hazardous materials) results in excess lifetime cancer risk

of less than five-in-one million and a non-cancer cumulative hazard index of less than 0.5.

3. Public Safety and Welfare. A level of no significant risk to public safety and welfare exists or has been achieved if the use of the secondary material will not pose a threat of physical harm or bodily injury to people and will not create nuisance conditions, including, but not limited, to noxious odors and noise, in the foreseeable future.

4. Environment. A level of no significant risk of harm to the environment exists, or has been achieved, if there is no indication of the potential for biologically significant harm (at the subpopulation, community, or system-wide level), either currently or for any foreseeable period of time, to Environmental Receptors considering their potential exposures to the secondary material.

(c) Application Requirements. In addition to the general application requirements cited at 310 CMR 19.060(4), the applicant shall submit the following:

1. Characterization. The application shall include risk characterization information, the scope and level of effort of which shall depend on the secondary material, the beneficial use, and the specific exposure assumptions identified. The characterization shall be of sufficient scope and adequately documented to demonstrate compliance with the Reuse Criteria at 310 CMR 19.060(12).

2. Location. If the Department determines during the pre-application review that the location of the beneficial use activity must be identified in order to manage risks posed by the beneficial use activity, a U.S.G.S. 7.5 minute topographic map or smaller scale equivalent map clearly marking the location(s) of the beneficial use activities.

3. End of Use Management. A description of how the secondary material may be managed when removed or processed during its lifecycle.

(d) Property Owner Notification. The Applicant shall prepare and record, when required by permit term or condition, a record in the Registry of Deeds, Land Court, or other permanent record approved by the Department that shall:

1. Provide notice to holders of any interest(s) in a property or a portion thereof (including without limitation, owners, lessees, tenants, mortgagee, and holders of easement rights) of the existence and location of the secondary material at such property and the conditions for continued beneficial use and ultimate disposal, if applicable;

2. Outline management options if removed, modified, or processed during its lifecycle to prevent adverse impacts and significant risks to public health, safety and the environment, including, but not limited to, nuisance conditions and public welfare impacts; and,

3. Provide reference to the Department beneficial use application file by including the permit application transmittal number and file location.

(16) Category 4 -- Use of Secondary Material in Unrestricted Applications.

(a) Applicability. Secondary materials that are beneficially used in applications that do not limit exposure to potential human or environmental receptors from secondary material constituents are reviewed in accordance with this section when constituents have the potential to adversely impact or create a risk to public health, safety, or the environment, including, but not limited to, nuisance conditions or public welfare impacts when improperly stored, treated, transported, disposed of, used, or otherwise managed.

(b) Demonstrating Compliance With the Reuse Criteria. Compliance with the Reuse Criteria shall be made on the basis of provisions detailed in 310 CMR 19.060(15)(b), using conservative, unrestricted general exposure assumptions (e.g. residential exposures including sensitive receptors) in order to protect public health, welfare and the environment.

(c) Application Requirements. In addition to the general permit application requirements identified at 310 CMR 19.060(4) the application shall include characterization information, the scope and level of effort of which shall depend on the secondary

material, the beneficial use, and the general exposure assumptions identified with this category of use. The characterization shall be of sufficient scope and adequately documented to demonstrate compliance with the Reuse Criteria.

19.061: Special Waste

(6) Management Requirements for Special Wastes .

(a) General Requirements . The following conditions shall apply to any solid waste management facilities handling special wastes:

1. the operator shall keep a copy of the approval to manage a special waste on file at the facility and make available said approval letter upon request by Department representatives; and

2. the operator shall instruct and train employees in proper handling procedures for any special waste approved to be managed by the facility.

(b) Requirements for Handling Asbestos Wastes . In addition to the requirements at 310 CMR 19.061(6)(a), all asbestos waste, except as specified in 310 CMR 19.061(6)(b)3., shall be managed in accordance with 310 CMR 19.061(6)(b)1. and 2.

1. All facilities shall observe the following requirements for handling asbestos waste:

a. Asbestos waste shall not be accepted for disposal at solid waste combustion facilities.

b. Asbestos waste that has not been properly wetted, containerized and labeled according to 310 CMR 7.15 shall not be accepted at any solid waste management facility.

c. Asbestos waste that has been properly wetted, containerized and labeled in accordance with 310 CMR 7.15 shall not be accepted at any solid waste facility unless that facility has received approval from the Department in accordance with 310 CMR 19.061 to accept asbestos waste.

d. Asbestos waste that has been properly wetted, containerized and labeled shall be managed so as to maintain the integrity of its containers and to prevent emissions of asbestos fibers to the ambient air.

2. Landfill Specific Requirements . In addition to the requirements in 310 CMR 19.061(6)(b)1., landfills that have received approval from the Department to accept asbestos waste shall observe the following operational requirements:

a. Asbestos waste shall be immediately disposed in the landfill and shall not be stored at the landfill prior to placement in the landfill.

b. Asbestos waste shall be placed in the landfill in such manner as to prevent the release of asbestos fibers to the air during placement.

c. Asbestos waste shall be placed in the landfill using a method approved by the Department. The approved method shall be as described in 310 CMR 19.100 through 19.151, in Department guidance or in a Department approval or permit. All such approved placement methods shall include requirements that the asbestos waste is covered by sufficient amounts of either solid waste that does not contain asbestos and/or daily cover material to assure that no asbestos fibers are released to the air during or subsequent to compaction.

d. Accurate records of the surveyed location in the landfill of all asbestos waste shall be maintained. Locations of asbestos deposition shall be noted in the Record Notice of Landfill Operation pursuant to 310 CMR 19.100 through 19.204. Locations of asbestos deposition shall also be included whenever information regarding the property is recorded on the property deed pursuant to M.G.L. c. 111, § 150A.

e. Areas of the landfill containing asbestos shall be clearly marked by the operator.

f. Areas of the landfill containing asbestos waste shall not be excavated.

3. Requirements for certain classes of asbestos wastes . The following asbestos wastes are not subject to the provisions of 310 CMR 19.061 except as specified at 310 CMR 19.061(6)(b)1.a.:

a. intact and unbroken vinyl asbestos tile (VAT);
b. asphaltic asbestos-containing siding products and asphaltic asbestos-containing roofing materials such as roofing felts, and roofing shingles ~~and asphalt siding products~~ (Note: This does not include other asbestos containing roofing shingles and siding products such as those containing a cementitious binding characterized as being hard and brittle.); and
c. other asbestos waste so designated by the Department in writing.

19.062: Demonstration Projects or Facilities

(3) Department Review of an Application . The Department shall not grant a permit for a demonstration project unless:

(a) the application is complete and accurate;
(b) the facility has a valid site assignment, ~~if applicable~~ where required pursuant to the Site Assignment Regulations at 310 CMR 16.00;
(c) the facility has a valid permit and necessary authorizations issued by the Division of Solid Waste Management and/or other divisions of the Department, if applicable;
(d) the project can be adequately accommodated at a permitted facility without interfering with or disrupting normal operations of the facility, where the project is to be located at a permitted facility;
(e) the demonstration project or facility has merit and seeks to improve operational aspects of a facility, produce significant cost savings or serve to increase protection of human health and the environment;
(f) the proposed demonstration project will not cause or contribute to pollution of the air, water or other natural resources of the Commonwealth; and
(g) the applicant has provided adequate proof of financial assurance as specified in 310 CMR 19.062(5).

IV. SOLID WASTE MANAGEMENT FACILITIES - TEXT TO BE CHANGED

19.100: Preamble

310 CMR 19.100 through 19.151 ~~19.204~~ establishes minimum performance and design standards; operation and maintenance standards; and closure/post-closure requirements for solid waste landfills by supplementing, modifying or expanding upon the provisions of 310 CMR 19.000 through 19.099. Combined, these two sets of regulations govern all solid waste disposal activities at landfills. The procedures for application, approvals, authorizations, and transfers of such rights and interests are set forth in 310 CMR 19.000 through 19.099.

19.101: Applicability

Except as expressly exempted in 310 CMR 19.060: *Beneficial Use of Solid Waste*s, all solid waste disposed by placement into or onto land shall be done in a manner consistent with 310 CMR 19.000 and the requirements of 310 CMR 19.100 through 19.151. ~~19.001 through 19.099~~.

19.106: Quality Assurance and Quality Control Requirements

(1) All components used in the construction of the landfill shall be evaluated through a Quality Assurance and Quality Control (QA/QC) program to ensure that the completed landfill is constructed and will operate in accordance with its approved plans.
(2) All materials used in the construction of the landfill shall be subject to quantifiable and reproducible manufacturing and/or QA/QC methods that ensure that the material has been manufactured and installed in accordance with the material's design and operating specifications;
(3) The QA/QC program shall address requirements for evaluating the as-manufactured material, handling, storage, installation, corrective or remedial actions to correct deficiencies, and the final or completed function of all landfill components or systems.
(4) QA/QC methods for ~~bottom~~ liners shall include a method, where a technically proven and economically viable test method is identified, to test the actual hydraulic performance and/or integrity of the completed groundwater protection system, at the discretion of the Department.

19.107~~6~~: Construction Certification

(1) The construction of a permitted landfill shall be accomplished in compliance with a quality assurance/quality control (QA/QC) plan approved by the Department.
(2) The owner or operator shall hire an independent professional engineer, knowledgeable and experienced in matters of landfill construction who shall oversee all construction activities. The professional engineer shall:
- (a) determine and certify that all materials and construction of the landfill adheres to approved design plans and specifications, including:
  1. determining the initial and final grades of the landfill;
  2. overseeing the installation and construction of all components of the liner or final cover;
  3. overseeing the installation and completion of run-on and run-off controls, pumps, monitoring devices and other appurtenances.
- (b) oversee material and equipment QA/QC testing and verify all data generated through the testing program;
- (c) ensure that as-built plans, where required, accurately reflect the constructed facility; and
- (d) document all construction and QA/QC activities.

(3) Liners and final covers shall be constructed under the direction of a person with extensive experience in the installation of liners and final caps. Each phase of construction of a liner or cap shall be carried out and inspected under the direction of the independent professional engineer who shall certify that each phase of construction was completed in accordance with approved plans and specifications.

(4) The owner or operator shall submit a copy of the engineer's certification, as required at 310 CMR 19.011, on all construction and QA/QC activities to the Department.

19.110: Ground Water Protection Systems

(1) General Performance Standard. Landfills shall contain and collect leachate and minimize the migration of leachate out of the landfill into the underlying ground water to the maximum practicable extent and prevent the pollution of ground water during the active life of the facility and the closure and post- closure periods.

(2) General Design Standards. Landfill ground water protection systems shall:

(a) be constructed of materials that are compatible with the leachate and gases expected to be generated within the landfill;

(b) be constructed with a system to collect and contain leachate prior to treatment and/or disposal;

(c) provide coverage of all areas to be filled with solid waste and all base perimeters likely to be in contact with leachate;

(d) have a minimum slope of 2% over the entire ground water protection system; ~~and~~

(e) be constructed so that the slope of the liner provides positive drainage to the perimeter of the landfill;

(f) be constructed such that any liner, where the slope of the liner will be less steep than 4 horizontal to 1 vertical (4:1) runs at least five feet (vertically) up side slopes or berms;

(g) ~~(f)~~ be capable of withstanding the physical and mechanical stresses associated with the site and landfill development, operation and maintenance activities.

(h) be sufficiently strong and stable enough to withstand the static and seismic loads at the site under all expected operating conditions; and

(i) be designed with an overall factor of safety (FS) of 1.5 unless another FS can be demonstrated to the Department's satisfaction to be appropriate for site-specific reasons. All Factors of Safety shall be identified and justified.

(3) Minimum Liner Configuration. ~~A landfill liner shall, at a minimum, be comprised of a double composite liner consisting of:~~

(a) For any area where the slope of the liner will be less steep than 4 horizontal to 1 vertical (<4:1) the landfill liner shall, at a minimum, be comprised of a double composite liner consisting of:

1. a primary composite liner consisting of :
   a. a low permeability compacted soil layer or admixture overlain by a flexible membrane liner (FML); or,
   b. a geosynthetic clay liner (GCL) overlain by a flexible membrane liner (FML);
2. a leak detection and secondary collection system located between the primary and secondary liner; and
3. a secondary composite liner consisting of:
   a. a low permeability compacted soil layer or admixture overlain by a flexible membrane liner (FML); or,
   b. a low permeability compacted soil layer overlain by a geosynthetic clay liner (GCL) and a flexible membrane liner (FML).

(b) For any area where the slope of the liner will be steeper than or equal to 4 horizontal to 1 vertical (>4:1) the landfill liner shall, at a minimum, be comprised of a double liner consisting of:

1. a liner configuration that conforms to 310 CMR 19.110(3)(a) above; or
2. a double liner consisting of:
   a. a primary liner consisting of a FML;
   b. a leak detection and secondary collection system located between the primary and secondary liner; and
   c. a secondary composite liner consisting of:
      i. a low permeability compacted soil layer or admixture overlain by a

flexible membrane liner (FML); or

ii. a low permeability compacted soil layer overlain by a geosynthetic clay liner (GCL) and a FML.

~~a low permeability compacted soil layer or admixture overlain by a flexible membrane liner. The~~

(c) Any FML layer shall be constructed so that the FML material is in direct contact with the low permeability soil layer or GCL layer directly below it. Where the GCL layer is to be used in conjunction with a low permeability soil layer, the GCL layer shall be constructed so that the GCL material is in direct contact with a the low permeability soil layer. Liner components shall meet the design and performance criteria specified at 310 CMR 19.110(5) through (10).

(4) Ground Water Protection System Components. Except as provided in 310 CMR 19.111: *Alternative Groundwater Protection System Desig*n, and 310 CMR 19.114: *Ground Water Protection System and Final Cover Waiver*s, ground water protection systems shall consist, at a minimum, of:

(a) a sub-grade layer;

~~(b) a liner composed of, at minimum, a composite liner;~~

(b) a secondary composite liner;

(c) a leak detection and secondary collection system;

(d) a primary composite liner;

~~(c)~~(e) a drainage layer or layers;

~~(d)~~(f) a leachate collection system; and

~~(e)~~(g) a leachate storage system unless the leachate collection system is to be directly connected to a sewer system.

(5) Subgrade Layer Standards.

(a) Performance Standard. The subgrade layer shall provide adequate structural support for the ground water protection system and the solid waste disposed in the landfill;

(b) Design Standards. The subgrade layer shall:

1. be compacted, uniform and ~~substantially~~ free of debris, angular rocks, plant materials and other foreign materials that may damage low permeability liner materials; and

2. be of sufficient thickness to ensure a minimum of four foot separation between the top of bedrock or the maximum high ground water table, as determined using acceptable methods, and the bottom of the lowermost low permeability layer.

(6) Low Permeability Layer (Liner) Standards.

(a) Performance Standards. A low permeability layer shall:

1. minimize to the greatest practicable extent the movement of leachate through the liner; ~~and~~

2. be designed and constructed to meet the permeability design standard for the expected life and post-closure period of the facility; and

3. be constructed in accordance with the quality assurance and quality control requirements of 19.106.

(b) Design Standards.

1. Low Permeability Soil/Admixture Layer Standards. Compacted low permeability soil or admixture layers shall:

a. have a minimum thickness of one foot when used in the primary composite liner or have a minimum thickness of two feet when used in the secondary composite liner unless a GCL is used in the secondary liner, then only one foot is required;

b. have a maximum in-place saturated hydraulic conductivity of 1 x 10 -7 cm/sec. throughout the entire thickness of the layer;

c. have a minimum post-settlement slope of two percent;
d. be ~~substantially~~ free of materials that because of their physical, chemical or biological characteristics may cause or contribute to an increase in the permeability of the liner or otherwise cause a failure of the liner; and
e. be compacted to minimize void spaces and support the weight imposed by the waste disposal operations without settling so as to cause or contribute to the failure of the liner or leachate collection system.

2. Flexible Membrane Liner Standards. Flexible membrane liners shall:
a. be of sufficient thickness as determined by the Department;
b. be constructed to ensure that the seams connecting FML panels are of equal or greater strength than the panels or manufacturer's seams within panels and are oriented, as much as is practical, parallel to the slope and not across the slope;
c. have sufficient flexibility and strength for the proposed application, taking into consideration tensile strength, puncturability, stress cracking and chemical compatibility; and
d. be capable of being seamed to produce leak-tight, high- strength seams that retain their integrity during liner installation, operating life and the post-closure period.

3. Geosynthetic Clay Liners (GCLs) Standards. Geosynthetic clay liners shall:
a. have sufficient bentonite (or similar low permeability clay) to provide an effective low permeability layer;
b. be constructed to ensure that the bentonite (or similar low permeability clay) will be distributed and retained uniformly and securely throughout the GCL during ~~manufacture, installation,~~ the operating life and the post-closure period;
c. have sufficient durability for the proposed application, taking into consideration hydration, chemical compatability, desiccation and other considerations that may affect initial or long term performance; and
d. be capable of being seamed or joined to produce leak-tight connections that retain their integrity during the operating life and the post-closure period.

(7) Drainage/Protection Layers.

(a) Performance Standard. Drainage/protection layers shall:
1. provide continuous and free flowing drainage over the entire liner; and
2. provide adequate protection to the liner from equipment and solid waste disposed in the landfill.

(b) General Design Standards. The drainage/protection layer shall use materials and be designed and constructed ~~to ensure~~ so that:
1. the drainage layer will not become clogged or in any other way be impaired from allowing free-flowing drainage of leachate;
2. ~~1. the layer has a minimum thickness of 18 inches~~ when used as a part of the primary leachate collection system the layer shall;
a. have a minimum thickness of 18 inches;
b. when a soil is used, the lower twelve inches has a minimum in-place hydraulic conductivity of 1 x 10 -2 cm/sec and the upper six inches has a minimum hydraulic conductivity of 1 x 10 -3 cm/sec, or when a geonet is used, eighteen inches of soil with a minimum in-place hydraulic conductivity of 1 x 10 -3 cm/sec is acceptable; and
c. be designed in accordance with 19.110(9) below.
3. ~~2. the layer has a minimum thickness of 12 inches~~ when used as a part of a secondary leachate collection or leak detection system the layer shall;

a. have a minimum thickness of 12 inches with a minimum in-place hydraulic conductivity of 1 x 10^{-2} cm/sec when a soil is used; or
c. be designed in accordance with the 19.110(8) below.

4. the integrity of the layer is maintained by preventing the infiltration of fine material by being bound, as necessary, on its upper and/or lower surfaces with filter material, such as a geotextile filter fabric.

~~3. when a soil is used, the lower twelve inches has a minimum in-place hydraulic conductivity of 1 x 10-2 cm/sec and the upper six inches has a minimum hydraulic conductivity of 1 x 10-3 cm/sec, or when a geonet is used, eighteen inches of soil with a minimum in-place hydraulic conductivity of 1 x 10-3 cm/sec is acceptable; and~~

~~4. the drainage layer will not become clogged or in any other way impaired from allowing free-flowing drainage of leachate.~~

(c) Synthetic Drainage Material (Geonet) Design Standards. In addition to the standards specified at 310 CMR 19.110(7)(a) and (b), geonets used as a part of a drainage /protection layer shall:

1. be of sufficient strength to prevent deformation and impairment of function by the weight of vehicles and the solid waste to be disposed;

2. have sufficient flow capability; ~~and~~

~~3. be properly oriented for proper function.~~

3. be designed and evaluated for its effective long-term flow capacity using reasonable and acceptable evaluation methods that consider factors that may reduce (reduction factors) the design flow capacity caused by, but not limited to, overburden forces, (deformation, creep, etc.),intrusion by overlying materials such as filter fabrics or soil, and chemical or biological clogging; and

4. be designed with an overall factor of safety appropriate to ensure the effective long-term performance of the drainage layer.

(8) Leak Detection and Secondary Collection Systems Between Liners.

(a) Performance Standards. Leak detection and secondary leachate collection systems~~, where utilized in the design of a liner,~~ shall allow detection of leakage of leachate through the primary or uppermost liner and the collection and removal of leachate from the secondary liner. ~~In the event of leakage through the primary liner the Department may require corrective action based on the quality and quantity of leachate collected or detected.~~

(b) Design Standards. ~~Where a leak detection system is to also function as a secondary leachate collection system the leak detection system shall meet the design standards specified under 310 CMR 19.110(9).~~ A leak detection and secondary collection system shall be designed:

1. to collect and remove leachate discharged into a drainage layer between the primary and secondary liners with an efficiency so that a leakage rate of 10 gallons per day/per acre, or greater, will be detected within 24 hours of the leak's beginning;

2. to the extent feasible, identify the general location of the ~~origin of the~~ leak;

3. to allow the quantity and quality of leachate, or any liquid, in the leak detection system, to be measured and analyzed separately from the leachate in the primary leachate collection system;

4. with an Action Leakage Rate (ALR) which shall be reasonable and appropriate based upon the design and components of the double liner system;

5. so that the head in the secondary collection system will not, in general, exceed the thickness of the drainage layer between the liners; and

6. with a leak response plan that details the actions to be taken to evaluate and, when required, eliminate the cause of the leak.

(c) Action Leakage Rate (ALR).

1. The maximum action leakage rate shall be 100 gallons per acre/day, based on a 30-day average, unless the Department has established another action leakage rate for that facility, phase or operational period, but in no case shall a single day

leakage rate exceed twice the ALR.
2. An ALR shall be identified for each stage of the operational life of the liner system;
3. Where leakage into the leak detection system is occurring at a rate greater than one half the ALR, or a single day exceeds twice the ALR, the owner or operator of the facility shall notify the Department within 72 hours.
4. In the event of leakage through the primary liner the Department may require corrective action based on the quality and quantity of leachate collected or detected.

(9) Primary ~~and Secondary~~ Leachate Collection and Removal Systems.

(a) Performance Standards. Leachate collection and removal systems shall:

1. collect and remove the leachate generated by the landfill as quickly and efficiently as is practicable;
2. provide for the drainage of leachate from the liner into appropriate storage, treatment or transfer facilities;
3. be designed to ensure that the hydraulic head of leachate can be maintained at less than one foot at the expected flow except during storm events and be designed to drop below one foot within ~~24 hours~~ 7 days of a 25-year storm for the primary operational phase of the landfill.
~~4. collect and remove leachate discharged into a drainage layer between liners of a multiple liner system where a multiple liner system is used.~~

(b) Design Standards. The following design standards shall apply to primary ~~or secondary~~ leachate collection systems:

1. pipes shall be placed within a drainage layer in material which meets the standards set forth at 310 CMR 19.110(7);
2. pipes shall have sufficient diameter and spacing to be capable of freely draining the maximum expected leachate flow from the liner ~~or, in the case of a secondary leachate collection system, through the primary liner~~;
3. trunk lines shall have a minimum slope of 1%;
4. lateral lines shall have a minimum slope of ½%;
5. pipes shall be of sufficient thickness and strength to support the maximum static and dynamic loads of vehicles and overlying solid waste without failing;
6. piping systems shall be designed with sufficient access points to permit maintenance cleaning as necessary;
7. the number of penetrations of the liner shall be minimized. Penetrations of the liner shall be properly sealed to prevent leakage and, wherever possible, be designed with access so as to repair damaged seals, and
8. all sump areas shall be designed to allow access for maintenance of pumps and, at a minimum, provide for remote inspection.

(10) Leachate Storage Facilities.

(a) Performance Standard. Leachate storage facilities shall provide for leak-tight storage of the leachate reasonably expected to be generated by the landfill.

(b) Design Standards. Leachate storage facilities shall:

1. conform to the criteria established by the Department's ~~Division of Water Pollution Control~~ regulations, policies, or guidance for industrial wastewater holding facilities;
2. have sufficient strength to ensure that the tank does not collapse or rupture;
3. be located outside the landfill liner system;
4. have sufficient capacity to store the leachate generated by the landfill;
5. be designed with a monitoring device to accurately monitor the volume of liquid collected within the storage facility and be equipped with a system capable of warning the operator when the tank requires pumping; and
6. incorporate secondary containment or a leak detection system.

19.111: Alternative Ground Water Protection System Design

(1) Landfill ground water protection systems designed using materials, technologies or methodologies other than those expressly provided for under 310 CMR 19.110: *Ground Water Protection System*s, may be permitted by the Department provided the proponent affirmatively demonstrates to the Department's satisfaction that the alternative ground water protection system design meets the standards established under 310 CMR 19.105: *Equivalency Review Standards and Procedure*s.

(2) Pre-existing liner systems. The following requirements apply when a permit review and approval is needed from the Department prior to placing waste vertically (hydraulically upgradient) over an existing liner system (or where there is no liner) that does not comply with the groundwater protection system requirements of these regulations. Waste that is being placed in areas under an existing valid Authorization to Operate permit are not subject to this section until the capacity represented by that approval is exhausted.

(a) Areas where there is no existing liner. Vertical expansions that will place waste over an area that has no underlying groundwater protection system will be required to construct a double composite liner system in full compliance with these regulations.

(b) Areas where there is an existing single liner. Vertical expansions that will place waste over an area that has an existing single liner (such as a soil only or FML only liner) will be required to construct a double composite liner system in full compliance with these regulations.

(c) Areas where there is an existing single composite liner or a double liner that is not a double composite liner:

1. Performance standard: A hydraulic separation layer shall be constructed using technologies or components that will result in a system that prevents, to the maximum extent possible, leachate generated in areas approved after the effective date of these regulations from mixing with leachate collected in areas approved prior to these regulations. In general, such systems shall use combinations of low permeability barriers and high capacity drainage systems. All leachate intercepted by the hydraulic separation layer shall be directed to and collected in a double composite lined area.

2. Design Standard: For facilities disposing of MSW over an existing single composite liner functioning as designed, where the expansion area will operate for approximately 2 years or longer before installing a cap, and where the slope of the hydraulic separation layer will be equal to or steeper than 4:1, the presumptive design standard to meet the performance standard above shall be a single liner, such as an FML, GCL or 18" of soil with a maximum permeability of 10-7 cm/sec, in conjunction with a high performance drainage layer consisting of 12" of soil with a permeability no less than 1×10^{-3} cm/sec soil or 12" of less permeable soil in combination with a synthetic drainage layer such as a geonet.

3. Further Considerations. In situations where the assumptions listed above at 310 CMR 19.111(2)(c)2 are not the rule, the Department may approve alternative designs that have different requirements than the presumptive design standard. The Department will not approve an alternative design unless the applicant provides sufficient information to the Department's satisfaction that an alternative design will be as protective of the public health safety and the environment as the presumptive design.

(d) Areas where there is an existing double composite liner. The Department may require the installation of a hydraulic separation layer between vertical or horizontal sections or phases of a double composite lined landfill to isolate such areas for purposes of separately monitoring the performance of the groundwater protection systems in those discrete areas.

(e) Notwithstanding the requirements at 310 CMR 19.111(1), alternative designs may be approved subject to the equivalency review requirements at 310 CMR 19.105 or other

requirements as determined by the Department.

19.112: Landfill Final Cover Systems

(1) General Performance Standards . The final cover system shall:
(a) minimize the percolation of water through the final cover system into the landfill to the greatest extent practicable;
(b) promote proper drainage of precipitation ;
(c) minimize erosion of the final cover;
(d) facilitate the venting and control of landfill gas;
(e) ensure isolation of landfill wastes from the environment; and
(f) accommodate settling and subsidence of the landfill such that the above performance standards will continue to be met.

(2) General Design Standards . The final cover system shall:
(a) have a final top slope of not less than 5% and side slopes no greater than three horizontal to one vertical (3:1);
(b) be constructed of material(s) that are compatible with gases and leachate expected to be generated;
(c) be constructed so as to minimize erosion of all layers of the final cover by using terraces or other appropriate stormwater controls;
(d) be constructed so that the low permeability layer is protected from the adverse affects of frost and/or freeze/thaw cycles; ~~and~~
(e) be constructed to maintain slope stability~~.~~;
(f) be sufficiently strong and stable enough to withstand the static and seismic loads at the site under all expected operating conditions; and
(g) be designed with a minimum factor of safety of 1.25 unless another FS can be demonstrated to the Department's satisfaction to be appropriate for site-specific reasons.

(3) Final Cover System Components . Except as provided in 310 CMR 19.113: *Alternative Landfill Final Cover System Design* , or 19.114: *Ground Water Protection System and Final Cover Waivers* , the final cover system shall, at a minimum, consist of:
(a) the subgrade layer;
(b) a landfill gas venting layer unless the subgrade layer is designed to function as a gas venting layer, or there is an active gas collection and extraction system and it is ~~determined~~ demonstrated that a gas venting layer is not needed;
(c) a low permeability layer or layers;
(d) a drainage layer;
(e) filter material (when required);
(f) a layer capable of supporting vegetation;
(g) the vegetative cover; and
(h) other components as may be required by the Department.

(4) Subgrade Layer Standards .
(a) Performance Standards . The subgrade layer shall provide adequate structural support for the final cover system and be capable of accommodating any anticipated subsidence or settling without impairing its ability to provide structural support;
(b) Design Standards . The subgrade shall:
1. be free of materials that may damage or abrade the low permeability layer or venting layer; and
2. be of sufficient thickness to cover all solid waste.

(5) Landfill Gas Venting Layer .
(a) Performance Standard . A landfill gas venting layer shall provide for the free movement of landfill gas out of the landfill to gas control devices or vents.
(b) Design Standard . Landfill gas venting layers shall:
1. be placed below the low permeability layer to facilitate the collection and control of landfill gases;
2. be of sufficient thickness and hydraulic conductivity to facilitate venting of landfill gases from below the low permeability layer;

3. be composed of either:
a. soil material that has:
i. a minimum thickness of six inches; and
ii. a hydraulic conductivity equal to or greater than 1 x 10^{-3} cm/second; or
b. when allowed by the Department, synthetic material (geonet) which shall:
i. be of sufficient strength to prevent deformation and impairment of function by the weight of vehicles or the final cover; and
ii. have sufficient flow capability; and
~~iii. be properly oriented for proper function; and~~
4. be bound on its upper and/or lower surface with filter material where needed to prevent the infiltration of fine material and to maintain the integrity of the layer.

(6) Low Permeability Layer Standards .

(a) Performance Standard . A low permeability layer shall:
1. to the greatest extent practicable, minimize the movement or percolation of water into the landfill;
2. promote positive drainage of the landfill final cover system and prevent erosion; ~~and~~
3. be designed and constructed to remain impervious for the expected life and post-closure period of the facility; and
4. be constructed in accordance with the quality assurance and quality control requirements of 19.106.

(b) Design Standards . ~~The low permeability layer shall be constructed in accordance with the Low Permeability Soil/Admixture Layer Standards at 310 CMR 19.112(6)(b)1. or the Flexible Membrane Liner Standards at 310 CMR 19.112(6)(b)2~~
1. Low Permeability Soil/Admixture Layer Standards . Compacted low permeability soil or admixture layers shall:
a. have a minimum compacted thickness of 18 inches;
b. be constructed using materials that have a maximum in-place saturated hydraulic conductivity of 1 x 10^{-7} cm/sec throughout the entire thickness of the layer;
c. be compacted to minimize void spaces;
d. be capable of supporting the weight imposed by the post- closure use without settling or causing or contributing to the failure of the low permeability layer; and
e. be free of materials that, because of their physical, chemical or biological characteristics, may cause or contribute to an increase in the permeability of the low permeability layer or otherwise cause a failure of the low permeability layer.
2. Flexible Membrane Liner Standards . Flexible membrane liners shall:
a. be of sufficient thickness as determined by the Department;
b. be constructed to ensure that the seams connecting FML panels are of equal or greater strength than the panels or manufacturer's seams within panels and are oriented parallel, as much as is practical, to the slope and not across the slope;
c. have sufficient flexibility and strength for the proposed application, taking into consideration tensile strength, puncturability, stress cracking and chemical compatibility; and
d. be capable of being seamed to produce leak-tight, high-strength seams that retain their integrity during final cover installation and the post-closure period.
3. Geosynthetic Clay Liners (GCLs) Standards. Geosynthetic clay liners shall:
a. have sufficient bentonite (or similar low permeability clay) to provide an effective low permeability layer;
b. be constructed to ensure that the bentonite (or similar low permeability clay) will be distributed and retained uniformly and securely throughout the GCL during manufacture, installation, operating life and the post-closure period;
c. have sufficient durability for the proposed application, taking into consideration hydration, desiccation and other considerations that may affect initial or long term performance; and
d. be capable of being seamed or joined to produce leak-tight connections that retain their integrity during ~~liner installation,~~ the operating life and the post-closure period.

(7) Drainage Layers .

(a) Performance Standard . Drainage layers shall provide continuous and freeflowing drainage over the entire low permeability layer.

(b) Design Standards . The drainage layer or system shall:

1. be placed above the low permeability layer;

2. be of sufficient thickness and hydraulic conductivity to drain the immediate and up-gradient areas of the final cover. ;

3. be designed so that the head in the drainage layer will not exceed the thickness of the drainage layer;

4. be designed based on the hydraulic loadings resulting from the actual materials used in the final cover system, such as the vegetative support layer infiltration rate;

3.5.. be composed of either:

a. soil material that has:

i. a minimum thickness of six inches; and

ii. a hydraulic conductivity equal to or greater than 1 x 10-3 cm/second; or

b. when allowed by the Department, synthetic drainage material (geonet) that shall:

i. be of sufficient strength to prevent deformation and impairment of function by the weight of vehicles or the final cover;

ii. have sufficient flow capability; and

iii. be designed and evaluated for its effective long-term flow capacity using reasonable and acceptable evaluation methods that consider factors that may reduce (reduction factors) the design flow capacity caused by, but not limited to, overburden forces, (deformation, creep, etc.),intrusion by overlying materials such as filter fabrics or soil, and chemical or biological clogging; and

iv. be designed with an overall factor of safety appropriate for the effective long-term performance of the drainage layer.

iii. be properly oriented for proper function; and

4.6 be bound on its upper and/or lower surface with filter material where needed to prevent the infiltration of fine material and to maintain the integrity of the layer; and

5.7 be maintained to prevent conditions that could compromise the integrity of the landfill or cause erosion.

(8) Filter Material Standards . Filter material, where placed, shall be capable of preventing the migration of fine soil particles into the drainage or venting layer.

(9) Vegetative Support/Protection Layer Standards.

(a) Performance Standards. The vegetative support/protection layer shall:

1. be of sufficient thickness and composition to support the selected vegetation; and

2. protect underlying layers from the adverse effects of desiccation, extremes of temperature, including frost effects, and erosion; and

3. consist of a topsoil, loam or equivalent type of soil based vegetative support material with a minimum organic content of 3%.

(b) Design Standards. There shall be at least 18 inches of soil material above the low permeability layer (310 CMR 19.112(6)). This 18 inches may be composed of soil in the vegetative support/protective layer (310 CMR 19.112(9)) and soil in the drainage layer (310 CMR 19.112(7)). The vegetative support/protection layer shall contain:

1. at least 12 inches of soil capable of supporting the selected vegetation; and

2. any additional soil material needed to create the required total thickness; or

2. at least 8-9 inches of soil with an organic content of 8-10% capable of supporting the selected vegetation in conjunction with a 12-inch thick drainage layer for a total vegetative/protection layer depth of 20-21 inches.

19.115: Storm Water Controls

(1) Performance Standard. Storm water controls shall prevent erosion, discharge of pollutants and protect the physical integrity of the landfill. and be managed according to applicable standards established by the Department. For purposes of meeting stormwater standards established by the

Department, recharge shall not be induced at the landfill, peak rate attenuation shall be in accordance with that described in the Design Standards at 310 CMR 19.115(2), and source controls and pollution prevention measures (including design of the landfill) shall be implemented to prevent discharge of pollutants. This standard applies to the construction, operational and post-operational phases of the landfill.

(2) Design Standards. Storm water controls shall be designed to:

(a) prevent flow onto the active portion of the landfill (i.e., any area without intermediate or final cover) during the peak discharge from a 24 hour, ~~25~~ 100-year storm; ~~and~~

(b) control the run-off from the entire ~~active portion of the~~ landfill of at least the water volume resulting from a 24 hour, ~~25~~ 100-year storm~~.~~ and

(c) the most recent precipitation atlas approved for use by the United States National Weather Service, or their predecessor the U. S. Weather Bureau, shall be used to determine the rainfall depth associated with the 100-year storm (currently Technical Paper-40, published May, 1961).

19.117: Air Quality Protection Systems

(1) General Performance Standard. Landfills shall control the concentration levels of explosive and malodorous gases and other air pollutants as necessary in order to maintain air quality and to prevent the occurrence of nuisance conditions or public health or safety problems.

(2) General Design Standard. Air quality protection systems shall be designed to control the concentration of explosive gases to no greater than 25% of the Lower Explosive Limit (LEL) or 10% of the LEL in any building, structure, or underground utility conduit at the property boundary at any time, excluding gas control or recovery system components or any leachate collection components.

(3) Gas Vents. At a minimum, passive gas vents shall be provided at all facilities in all areas of the landfill over which final cover has been applied.

(a) Performance Standard. Landfill gas vents shall allow for the movement and adequate venting of landfill gases in order to prevent the buildup of explosive concentrations of gas and prevent the lateral migration of gases beyond the boundaries of the landfill.

(b) Design Standards. Landfill gas vents shall be designed:

1. to maintain the integrity of the low permeability cap at the penetration of the cap;
2. to provide adequate venting of landfill gases;
3. with 'T's, goosenecks or other equivalent cap at the top of the riser pipe to allow effective venting;
4. to allow for retrofitting for active gas recovery or treatment at a later time if required;
5. to operate without clogging; and
6. to remain secure from vandalization.

(4) Installation. Gas vents shall be installed concurrently with the phased construction of a facility and in accordance with any permits or orders issued by the Department.

(5) Landfills shall demonstrate that they are in compliance with the State and Federal air quality regulations, including but not limited to, New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) requirements. In general a facility must document:

(a) which federal air quality regulations are applicable to the facility, either initially or at full build-out; and,

(b) how the facility will comply with all applicable state and federal air quality regulations.

V. MODIFICATIONS TO THE REQUIREMENTS FOR ASH MONOFILLS

~~19.119: Design Requirements for Ash Monofills~~

~~(1) Applicability. In addition to the regulations set forth in 310 CMR 19.100 *et seq*., 310 CMR~~

~~19.119 shall apply to all new landfills or upgrades and expansions of existing landfills, or parts thereof, in which ash and/or residues from solid waste combustion facilities burning municipal solid wastes are disposed. For the purposes of 310 CMR 19.00 such facilities shall be termed "ash monofills".~~

~~(2) Plans for Ash Monofills. Plans for ash monofills shall include all components and be submitted in accordance with the requirements of 310 CMR 19.104. In addition to the submittal requirements specified in 310 CMR 19.104, the plans for an ash monofill shall include:~~

~~(a) details of the manner by which a hydraulic separation between unburned refuse and ash shall be maintained;~~

~~(b) a discussion of how ash will be transported to and handled at the landfill, including any ash stabilization procedures; and~~

~~(c) a description of the means by which fugitive emissions of ash will be controlled.~~

~~(3) Ash Monofill Design.~~

~~(a) Ash monofills shall incorporate the design requirements for landfills set forth in 310 CMR 19.110 through 19.118, including ground water protection systems, final cover systems., except that ash monofills not located on top of prior solid waste landfills may not be required to install a gas venting layer, and surface and ground water monitoring systems, as well as all additional requirements set forth in 310 CMR 19.119.~~

~~(b) Ash monofills shall be designed to ensure that:~~

~~1. the ash is disposed and shall remain hydraulically separate from cells containing refuse. Hydraulic separation may be achieved by any one of the following techniques:~~

~~a. development of a new dedicated ash landfill or expansion area;~~

~~b. segregation of refuse and ash in the same lined area through the use of dikes, berms, or other suitable construction techniques; or~~

~~c. segregation of refuse hydraulically downgradient of the ash disposal area in the same lined area.~~

~~2. the ash is underlain by a ground water protection system meeting the performance and design standards for liners set forth in 310 CMR 19.110. Where ash is to be disposed on top of a former municipal waste landfill a liner shall be installed over the fill material where no liner exists in that landfill or portion thereof; and~~

~~3. fugitive emissions of ash are minimized.~~

~~(c) Ash monofills may be required to be equipped with an ash vehicle washdown area for the cleaning of ash from the vehicle prior to leaving the landfill. The design of the washdown facility, if required, shall ensure that washdown water is adequately collected for treatment and disposal.~~

19.131: Additional Operation and Maintenance Requirements for ~~Ash~~ Landfills That Accept Ash. ~~Monofills~~.

(1) General. In addition to the operation and maintenance requirements set forth in 310 CMR 19.130, operators of ~~ash~~ landfills that accept ash ~~monofills~~ shall comply with the operation and maintenance requirements set forth in 310 CMR 19.131.

(2) Fugitive Emissions. Ash landfills shall minimize the generation of fugitive emissions resulting from the delivery, dumping and compacting of ash.

~~(2)~~(3) Ash Moisture Content.

~~(a)~~ Ash shall be transported and delivered to an ash landfill ~~monofill~~ in a damp state, sufficient to prevent emissions of fugitive dust during the dumping, spreading, compacting and covering of the ash.

~~(b) Ash shall not contain excessive moisture which would cause or contribute to handling problems when disposed of in the ash monofill or contribute to excessive leachate generation.~~

~~(3)~~(4) Spreading and Compacting of the Ash .

(a) Ash shall not be deposited in an ash landfill ~~monofill~~ unless it is completely

extinguished.

(b) Ash shall be evenly spread in layers and thoroughly compacted.

~~(4) Other Solid Wastes .~~

~~(a) Ash monofills shall not accept any other types of wastes for disposal including refuse, liquid wastes, or sewage sludge unless specifically approved in writing by the Department.~~

~~(b) Ash monofills which are a part of larger facilities which accept other types of waste for disposal must be operated and maintained as ash monofills.~~

(5) Vehicle Washdown or Wheelwash. Ash landfills may be required to be equipped with an ash vehicle washdown area or wheelwash for the cleaning of ash from the vehicle prior to leaving the landfill. The design of the washdown facility or wheelwash, if required, shall ensure that washdown water is adequately collected for treatment and disposal.

VI. OTHER MISCELLANEOUS MODIFICATIONS

19.130: Operation and Maintenance Requirements

(15) Cover Material.

(a) General. All cover material shall:

1. control fires, vectors, the occurrence of nuisance conditions such as odors, dust or litter, and be placed in a manner so as to minimize erosion by wind and/or water;
2. maintain a physical separation of the solid waste from the surface environment.
3. be substantially odor free;
4. consist of materials suitable for carrying out the geotechnical and other functions of the cover material; and
5. be free of substances which would attract vectors and free of large objects which would hinder spreading and compaction or otherwise interfere with the proper functions of cover material.

(b) Effective Use. The Department reserves the right to limit the types and quantities of cover material used at a facility to meet the engineering function of that use, maximize capacity allocation or to otherwise address the waste management needs of the Commonwealth.

(c) ~~(b)~~ Daily Cover.

1. Daily cover material shall be workable under all weather and operational conditions.
2. A minimum of six inches of compacted soil shall be applied:
   a. over all exposed solid waste at the end of each working day; or
   b. more frequently and/or at greater depth, if necessary, to prevent fire and control vectors, odors, or blowing litter and to ensure that there is no exposed refuse.
3. A minimum quantity of daily cover material sufficient for 14 working days operations shall be stockpiled at the landfill site at all times.
4. Daily cover use is limited to a quantity no greater than twenty (20) percent by weight of the amount of waste disposed that day unless a greater amount is needed in order to conform to the requirements of 310 CMR 19.130 (15). Any quantity of daily cover used above this amount, except where stipulated, is considered disposal. Daily cover shall not be used in quantities greater than are necessary to achieve compliance with regulatory requirements. ~~Daily cover determined to be used in quantities greater than are reasonably necessary to achieve regulatory compliance shall be considered disposal not daily cover use.~~

5. ~~4.~~ Upon written request, the Department may approve in writing, the use of alternative daily cover materials and/or different thicknesses of daily cover pursuant to 310 CMR 19.105: *Equivalency Review Standards and Procedure*s. Where non-soil cover materials are proposed the material must meet or exceed the standards established at 310 CMR 19.130(15)(a) and (b).

(d) ~~(c)~~ Intermediate Cover.

1. Intermediate cover material shall be used ~~provide a seal~~ to prevent or minimize the infiltration and percolation of water into the landfill.

2. Intermediate cover shall be applied under the following circumstances:

a. a minimum of six inches of uniformly compacted intermediate cover, in addition to the daily cover, shall be applied on the exterior top and side slopes of any filled areas of a landfill which has not received or will not receive solid waste for 30 days or other time period as approved by the Department; or

b. a minimum of one foot of uniformly compacted intermediate cover in addition to the daily cover, shall be applied on the exterior top and side slopes of any filled areas of a landfill which has not or will not receive solid waste for six months or longer or other time period as approved by the Department.

3. Acceptable Materials.

a. The following soils, classified pursuant to the Unified Soil Classification System, may be used without prior Departmental approval: G.C., S.C., C.H., C.L. and O.H.

b. All other soils proposed for use as intermediate cover at a landfill shall be tested by a qualified laboratory and be approved as intermediate cover by the Department prior to placement.

4. Other Materials. Upon written request, the Department, pursuant to 310 CMR 19.105: *Equivalency Review Standards and Procedure*s, may approve, in writing, the use of synthetic covers or other alternatives if such materials provide equivalent or greater protection than the materials listed in 310 CMR 19.130(15)(c)3.a.

(e) ~~(d)~~ Final Cover.

1. The application of final cover, or alternate in accordance with 310 CMR 19.112, 19.113 or 19.114, shall begin to be applied to a section of the landfill as soon as possible, but no later than 90 days, or other schedule as approved by the Department, after the circumstances specified below. When greater than 30 days of the 90 day period falls between November 1 and March 1, final cover shall begin to be applied no later than the following April 1.

a. Active landfills:

i. whenever a new lift has not or will not be applied within a one year period unless the area is permitted to accept additional waste;

ii. upon reaching final approved elevations;

iii. whenever a phase of the landfill has been completed; or

iv. whenever the permit expires or terminates for any reason, or is revoked.

b. Inactive landfills:

i. in accordance with schedules established pursuant to 310 CMR 19.150, Landfill Assessment Requirements, and 310 CMR 19.151: *Landfill Corrective Action Requirement*s.

2. The final cover shall be designed and constructed in accordance with the requirements established in 310 CMR 19.112, 19.113 or 19.114.

3. Final cover shall be maintained to prevent erosion and ensure the integrity of the cap.

(f) ~~(e)~~ Maintenance of Intermediate or Final Cover.

1. The final cover system shall be repaired immediately upon the detection of any failure which may result in the release of pollutants to the environment and shall be maintained and repaired during the active life of the landfill, the closure period and the post-closure period.

2. Operators shall repair the intermediate cover, including cover vegetation if used, of all areas on which intermediate cover has been applied.

(18) Top Slope and Side Slopes .

(a) The operator shall ensure that the final top slope has a minimum grade of 5%.

(b) The operator shall ensure that no top slope or side slope grade shall result in excessive erosion.

(c) The operator shall ensure that final exterior side slopes shall not exceed a slope of three horizontal to one vertical (3:1).
(d) The operator shall ensure that in no case shall an unstable slope be created or a slope that could result in abnormal stress on the liner system.

(19) Storm Water Drainage.
(a) The operator shall provide sufficient storm water drainage controls and diversion structures, channels or ditches to promote drainage off of the landfill, minimize run-on onto the landfill, prevent uncontrolled ponding on the landfill or uncontrolled ponding adjacent to the filled area.
(b) Storm water drainage structures shall be designed, constructed and maintained so as to ensure integrity of the drainage structures and so as to prevent erosion of the landfill.

(20) Erosion Control.
(a) The operator shall institute such soil erosion control measures as are necessary to ensure the retention and integrity of the daily, intermediate or final cover.
(b) The operator shall ensure that no solid waste or leachate are carried off-site due to erosion.
(c) The operator shall ensure that siltation due to erosion shall not migrate off-site.
(d) In a situation where significant settlement, uncontrolled ponding of waters or erosion of the landfill or cover material placed over the landfill occurs during the operation, closure or the post-closure period the operator or owner shall immediately institute corrective measures ~~actions~~.

(21) Boundary and Elevation Markers .
(a) The operator shall establish and maintain boundary markers at the outermost boundaries of waste deposition and at the property boundaries. Markers shall, at a minimum, be established at every change in direction of the boundary.
(b) The operator shall establish and maintain at least one reference elevation marker on an area of the site that does not contain solid waste. ~~elevation markers on all active and inactive phases of the landfill.~~

(30) Leachate Collection, Treatment and Disposal .
(a) Leachate shall be collected, handled, treated on or off-site and disposed in accordance with approved plans and the permit.
(b) The storage of leachate should not exceed one foot of hydraulic head on the liner except during storm events and be designed to drop below one foot within ~~24 hours~~ seven days of a 25-year storm for the primary operational phase of the landfill.
(c) Leachate shall not be discharged directly to waters of the Commonwealth except in accordance with a discharge permit issued by the Department pursuant to 314 CMR 5.00 or 7.00.
(d) Leachate shall not be discharged to a sewer except in accordance with a sewer connection permit issued by the Department pursuant to 314 CMR 12.00.
(e) Leachate shall be removed from a landfill leachate storage facility for off-site treatment or disposal only by a licensed liquid waste hauler and only when there is a contractual or otherwise appropriate guarantee for disposal of the leachate.
(f) The operator shall have contracts or otherwise appropriate ~~guarantees~~ plans for back-up handling, treatment and disposal for leachate expected to be generated by the landfill in the case of interrupted service of the primary handling, treatment and disposal option.
(g) Inspection reports, as required under 310 CMR 19.130(35), shall include the quantity of leachate generated, the leachate disposal location, results of leachate tank testing and monitoring and other routine maintenance performed.
(h) Leachate collection, treatment, and disposal shall continue during the entire active life of the landfill, and during the closure and the post-closure periods.

(35) Inspections .

(a) The facility shall be inspected by a registered professional engineer, or other qualified professional approved by the Department, experienced in solid waste management, and retained by the owner/operator, on a frequency approved by the Department in the Operation and Maintenance Plan.

(b) An inspection shall:

1. be reported in writing and shall describe in detail the status and condition of all operating and monitoring equipment, appurtenances and devices; the results of any monitoring programs required by 310 CMR 19.000, permits or orders; any deviation from compliance with operation and maintenance requirements set forth at 310 CMR 19.130, the site assignment, permit, or the authorization to operate, any actions taken to correct such deviations, as required by the Department or recommended by the inspecting engineer; and schedules to correct identified problems.

2. be signed and dated by the inspecting engineer, or other professional approved by the Department, certifying that to the best of his/her knowledge all information is accurate and complete.

(c) The operator shall submit one copy of the inspection report to the Department and one copy to the board of health no later than fourteen ~~seven~~ days following the date of the inspection.

(d) The operator shall be responsible for the timely submission of inspection reports to the Department and the board of health.

(36) Re-circulation of Leachate. The Department may allow the re-circulation of leachate if it is demonstrated to the Department that such a procedure will be conducted to achieve a reasonable environmental goal and the operation will not compromise the integrity of the landfill, including the liner and leachate collection systems, or result in unacceptable adverse impacts to the public health, safety or the environment. A request for leachate re-circulation shall include:

(a) the goals and expectations of the re-circulation activity;

(b) a report detailing the engineering considerations that need to be addressed by the re-circulation activity including, but not limited to, stability ~~issues~~ of the landfill, leachate collection system performance, odor concerns and landfill gas issues (generation rate and controls, etc.);

(c) identification of potential adverse impacts (odors etc.) resulting from the re-circulation activity and a contingency plan to address any potential adverse impacts should they occur;

(d) methods used to monitor the performance of the re-circulation operations to ensure they are within safe operating parameters and achieving project goals;

(e) amount and rate of leachate to be recirculated, how leachate will be distributed, and storage needs and methods; and,

(f) an evaluation of financial assurance mechanisms to ensure the availability of adequate funds to address corrective actions that may result if there are problems with the re-circulation system.

19.132: Environmental Monitoring Requirements.

(1) Surface and Ground Water Monitoring.

(a) Sampling and analysis of surface and ground water shall be done in accordance with methods approved by the Department.

(b) The owner/operator shall conduct surface and ground water monitoring at sampling points established in the permit and/or as required by the Department. The groundwater point of compliance for solid waste landfills shall be no more than 150 meters from the edge of the waste disposal area (as delineated in the facility's current DEP permit or specified in the engineering plans referenced in the permit), or the property line, whichever is less.

(c) The owner/operator shall establish background surface water and ground water quality at sampling points hydraulically upgradient of the landfill. Background water quality shall be determined by a minimum of four quarterly rounds of samples for each of the monitoring parameters or constituents listed in 310 CMR 19.132(1)(h).

(d) The owner/operator shall conduct surface and ground water monitoring on a schedule

established in the permit or as required by Department. At a minimum, monitoring shall be performed semi-annually except as required pursuant to 310 CMR 19.132(1)(c), unless the Department approves, in writing, a different frequency of sampling.

(e) The Department may refuse to accept monitoring data where:

1. the sample was taken from a ground water monitoring well for which the Department has not received and approved as-built construction plans, boring logs and well locations;
2. the sample was taken from a ground water monitoring well constructed in a manner not approved by the Department;
3. the analyses were performed by a laboratory other than a Massachusetts certified laboratory, unless the sample is accompanied by a complete QA/QC submittal; or
4. the sample was not handled in accordance with the sampling and preservation requirements *(e.g*., sample container, holding time and sample volume) specified by the testing method.

(f) All analytical results shall be submitted to the Department within 60 days ~~after the scheduled sampling period~~ after the date of sample collection or as specified in the permit. The analytical results shall be summarized in tables with a discussion of the results. The results shall include, unless otherwise approved by the Department, the following information:

1. site plans or maps showing sampling locations, distribution of contaminants and groundwater flow direction;
2. a letter report briefly summarizing the data and identifying any issues of concern;
3. all field Quality Assurance/Quality Control information; and
4. chain of custody forms.

(g) Static ground water elevations and total well depth shall be recorded prior to collecting a ground water sample whenever a monitoring well is to be sampled.

(h) At a minimum, surface and ground water samples shall be analyzed for the following parameters, unless otherwise approved by the Department based on review of past monitoring results or other relevant information:

1. Indicator parameters:
   a. pH (in situ);
   b. Alkalinity;
   c. Temperature (in situ);
   d. Specific Conductance (in situ);
   e. Nitrate Nitrogen (as Nitrogen);
   f. Total Dissolved Solids;
   g. Chloride;
   h. Calcium;
   i. Sodium;
   j. ~~h~~. Iron;
   k. ~~i~~. Manganese;
   l. ~~j~~. Sulfate;
   m. ~~k~~. Chemical Oxygen Demand (COD); and
   n. ~~l~~. Dissolved Oxygen.

2. Inorganics:
   a. Arsenic;
   b. Barium;
   c. Cadmium;
   d. Chromium;
   e. Copper;
   f. Cyanide;
   g. Lead;
   h. Mercury;
   i. Selenium;
   j. Silver; and
   k. Zinc.

3. all of the compounds included in EPA Method 8260, as amended, and methyl ethyl

ketone, methyl isobutyl ketone, ~~and~~ acetone and 1,4 dioxane. In addition, unknown peaks having intensities greater than five times the background intensity shall be identified (Method 8260 is detailed in the EPA publication SW-846, entitled *Test Methods for Evaluating Solid Waste*.); and

4. any additional parameters required by the Department.

(i) Practical Quantitation limits (or laboratory reporting limits) must meet or be below the Maximum Contaminant Level (MCL) or applicable standard for each analyte tested or the data will not be accepted.

~~(i)~~ (j) If the concentrations of any of the parameters listed in 310 CMR 19.132(1)(h) exceed the state or federal drinking water standards, Maximum Contaminant Levels (MCLs), Ambient Water Quality Standards for surface water samples, or alternative standards established in a permit, or guidelines or standards established by a permit, order or authorization issued by the Department for contaminants for which no federal or state standard exists, at any sampling point, the owner/operator shall:

1. notify the Department within 14 days of the finding; and
2. collect, analyze and submit to the Department another round of samples within 60 days of the prior date of sample collection and determine the concentration of all parameters identified in 310 CMR 19.132(1)(h) that were exceeded or as specified by the Department.

~~(j)~~ (k) Where the Department determines, at any time, based upon the ground and surface water analyses from the facility, up-gradient water quality and baseline water quality, that assessment and corrective actions shall be required, the operator shall undertake the assessment and/or corrective actions as determined by the Department. Such assessment shall characterize the full nature and extent of contamination, and the risks of harm to public health, safety and the environment in accordance with the requirements of 310 CMR 19.150 et. seq. and 310 CMR 40.0114. In establishing the applicable standards for groundwater down-gradient of the point(s) of compliance the Department shall consider the factors and procedures contained in sections 310 CMR 40.0900 and 310 CMR 40.1000.

(l) Nothing in this section shall limit the responsibility of the landfill to comply with the provisions of M.G.L. Chapter 21H, section 4, M.G.L. Chapter 111 section 150A, 310 CMR 19.150, and 310 CMR 40.0114 at all locations down-gradient of the point(s) of compliance.

(4) Gas Monitoring.

(a) The operator shall sample and physically and chemically characterize the recovered gas, condensates, or any other residues generated, and submit a copy of such analyses to the Department.

(b) Gas monitoring shall be conducted as follows:

1. Sampling and analysis of landfill gas shall be done in accordance with methods approved by the Department.
2. The owner/operator shall conduct landfill gas monitoring at sampling points established in the permit and/or as required by the Department.
3. The owner/operator shall conduct landfill gas monitoring on a schedule established in the permit or as required by Department. Monitoring shall be performed quarterly unless otherwise approved by the Department. ~~At a minimum monitoring shall be performed quarterly.~~

19.140: Landfill Closure Requirements

(1) General. Any facility that must stop accepting solid waste in accordance with 310 CMR 19.000, any permit, authorization or order issued by the Department or a court of competent jurisdiction or under any other circumstances shall comply with the requirements of 310 CMR 19.140.

(2) Notification of Voluntary Closure. The owner and/or operator shall notify the Department no later than six months prior to the date that the facility will stop accepting solid waste.

(3) Closure Assessment. The owner or operator of a landfill shall initiate an assessment in accordance with 310 CMR 19.150 prior to landfill closure to determine and evaluate the extent of any adverse impact(s) of the landfill on the environment as a result of the construction or operation and maintenance of the facility and develop a corrective action design in accordance with 310 CMR 19.151.

(4) Preparation and Submittal of Final Closure/Post-Closure Plans. The operator shall submit the final closure/post-closure plan prior to undertaking any closure construction activities. In addition to the information provided in the conceptual closure/post-closure plan developed in accordance with 310 CMR 19.104(6), the final closure/post-closure plan shall include:

(a) a report containing the findings of the site assessment required under 310 CMR 19.150;

(b) a proposed schedule of remedial or corrective actions, as required based on the assessment or other information, in accordance with 310 CMR 19.150 and 19.151;

(c) modified design plans, if necessary, based upon deviations from the conceptual closure plans and/or the actions required under 310 CMR 19.150 and 19.151; and

(d) a description and schedule of proposed post-closure maintenance, monitoring and assessment activities necessary to protect the public health, safety and the environment.

(5) Department Review . The Department may approve the final closure and post-closure plans if the Department is persuaded by the applicant that the provisions in the plan would ensure that:

(a) solid waste disposal activities shall be terminated upon the facility stop date;

(b) no conditions exist that could attract vectors or cause nuisance conditions;

(c) the facility will be deactivated or closed; and

(d) all practicable measures shall be taken to prevent pollution of the environment or a threat to public health or safety from the site.

(6) Completion of Closure . A facility shall be deemed closed on the date of the Department's written determination that the closure of the facility has been completed in accordance with the permit.

(a) A facility shall be deemed to be closed for the purposes of 310 CMR 19.000 on the date of the Department's determination.

(b) The post-closure period shall begin on the date of the Department's determination.

19.142: Landfill Post-Closure Requirements

(1) General . The owner, successors or assigns shall maintain, care for and monitor the site during the post-closure period in order to ensure the integrity of the closure measures and to detect and prevent any adverse impacts of the site on public health, safety or the environment.

(2) Post-Closure Period . For the purposes of 310 CMR 19.142 the post-closure period shall extend for a minimum of a 30 year period.

(3) Post-Closure Period Waiver . The Department may, upon request, reduce the post-closure period to less than 30 years if it finds that a shorter period will be sufficient to protect public health, safety, and the environment. The Department's review will include, but not be limited to, a consideration of the quantity and quality of leachate generated by the landfill, ground water monitoring results, characteristics of the waste disposed, stability of the waste, design of the facility and location of the site.

(4) Post-Closure Period Extension . The post-closure period may be extended by the Department at any time prior to the time that the post-closure period is due to expire where the Department finds an extension is necessary in order to ensure protection of public health, safety or the environment or to mitigate adverse impacts.

(5) Post-Closure Requirements . During the post-closure period the operator shall perform the following activities on any closed portion of the facility:

(a) take corrective actions to remediate and/or mitigate conditions that would

compromise the integrity and purpose for the final cover;
(b) maintain the integrity of the liner system and the final cover system;
(c) collect leachate from and monitor and maintain leachate collection system(s);
(d) monitor and maintain the environmental monitoring systems for surface water, ground water and air quality;
(e) maintain access roads;
(f) maintain landfill gas control systems; ~~and~~
(g) protect and maintain surveyed benchmarks; and
(h) have the landfill inspected by a third-party consulting Massachusetts Registered Professional engineer in accordance with the post-closure plan ~~at least annually~~.

(6) Reporting Requirements . The owner, successors or assigns shall submit a report every two years except as otherwise required by the Department during the post-closure period describing any activity at the site and summarizing the results of environmental monitoring programs and inspections by third-party consulting Massachusetts Registered Professional engineers as required at 310 CMR 19.142(5)(h).

(7) Additional Measures . The owner, successors or assigns shall institute such additional measures during the post-closure period as the Department deems necessary for the protection of public health or safety or the environment.

(8) Termination of the Post-Closure Period . The post-closure period shall end on the date of the Department's written determination that the post-closure care, maintenance and monitoring of the site are no longer required. Said written determination in no way limits or absolves the owner of liability for the site in the future.

19.150: Landfill Assessment Requirements

(1) Applicability .
(a) General . An assessment shall consist of all activities, as determined by the Department, required to identify the existence, source, nature and extent of pollution or threat of pollution, the extent of the adverse impact from any pollution and the feasible cost-effective alternatives available to correct or reduce the impacts of pollution. This shall include, but is not limited to, the identification and evaluation of all potential and actual migration pathways and receptors including the determination of exposure point concentrations.
(b) When An Assessment is Required . A landfill assessment shall be conducted:
1. when required by the Department pursuant to 310 CMR 19.132(1)(j)~~, (monitoring indicates that ground or surface water parameters exceed specified limits)~~;
2. when required by the Department pursuant to 310 CMR 19.132(4) when explosive gases exceed concentrations as specified in 310 CMR 19.132(4)(g) or landfill gases present a threat of pollution as specified in 310 CMR 19.132(4);
3. where a secondary leachate collection system or leak detection system exists at the landfill, the quantity of leachate detected in the secondary leachate collection system or leak detection system exceeds the design leakage, as specified in 310 CMR 19.132(2);
4. prior to final closure of the landfill as specified in 310 CMR 19.140(3); or
5. such other time as the Department determines that the landfill presents a threat to public health, safety or the environment.

(6) Corrective Action Alternatives Analysis .
(a) General . The Corrective Action Alternatives Analysis shall analyze options for corrective actions to eliminate or mitigate the potential adverse impact caused by conditions at the facility and to complete final closure in accordance with 310 CMR 19.140: *Landfill Closure Requirements* . In considering an alternative for corrective action, the owner or operator shall consider those actions that are necessary to comply with the provisions of 310 CMR 40.0114 and to minimize to the extent feasible the

potential for adverse future impacts from the landfill. ~~apply such state or federal regulations, standards, criteria, guidelines or allowable limits and written policies which are intended to protect the public health, safety and the environment. Where such protective limits have not been adopted, the owner or operator shall evaluate the potential for adverse impact on a facility or site-specific basis.~~

19.151: Corrective Action Requirements

(1) General . Corrective action shall consist of all measures necessary to address existing and potential impacts of the landfill on public health, safety and the environment as determined by the corrective action alternatives analysis and approved by the Department~~.~~ And to comply with the requirements of 310 CMR 40.0114.

VII. MODIFICATIONS TO THE HANDLING FACILITY REGULATIONS

19.200: Preamble

310 CMR 19.200 through 19.221, which follow, establish minimum performance and design standards and operation and maintenance standards for solid waste ~~transfer stations and h~~handling facilities. In combination with 310 CMR 19.001 through 19.083, these two sets of regulations govern all solid waste disposal activities at solid waste ~~transfer stations and~~ handling facilities. The procedures for application, approvals, authorizations, and transfers of such rights and interests are set forth in 310 CMR 19.000 through 19.083.

19.201: Applicability

All ~~transfer stations and~~ handling facilities shall be managed in a manner consistent with 310 CMR 19.200 through 19.221 and the requirements of 310 CMR 19.001 through 19.083. Facilities and operations exempted from site assignment by the Site Assignment Regulations, 310 CMR 16.05, are exempted from the requirements of 310 CMR 19.200 through 19.221.

19.202: Definitions

All terms used herein shall have the meanings set forth in 310 CMR 19.006 unless the context clearly implies or indicates another meaning.

19.203: Additional Requirements

Nothing in 310 CMR 19.000 shall be construed to limit the Department from determining on a facility or site specific basis that additional design or operation and maintenance components are required where conditions warrant such additional design or operation and maintenance measures to protect public health, safety and the environment or to mitigate potential adverse impacts. When deemed necessary by the Department, in response to conditions that have developed at a facility, the Department may require a facility to monitor air and/or surface or ground water to determine if the conditions present a threat to public health, safety or the environment.

19.204: ~~Transfer Station and~~ Handling Facility Plan (Reserved)

19.205 ~~Transfer Station and~~ Handling Facility Design Requirements

(1) Storm Water Controls

(a) Performance Standard. Storm water controls shall prevent erosion, prevent the discharge of pollutants, protect the physical integrity of the handling facility, and be managed according to applicable standards established by the Department. For purposes of meeting the stormwater standards established by the Department, recharge shall not be induced at the handling facility, peak rate attenuation shall be in accordance with that described in the Design Standards, 310 CMR 19.205(1)(b), and source controls and pollution prevention measures (including design of the handling facility) shall be implemented to prevent discharge of pollutants. This standard applies to the construction and operational phases of the handling facility.

(b) Design Standards. Storm water controls shall be designed to:

1. prevent run-on or flow onto the ~~active portion of the~~ waste or material handling or storage areas ~~handling facility~~ during the peak discharge from a 24 hour, 100-year storm;
2. control the run-off from the handling facility and paved areas of the site of at least the water volume resulting from a 24 hour, 100-year storm, and\
3. the most recent precipitation atlas approved for use by the United States National Weather Service, or their predecessor the U.S. Weather Bureau, shall be used to determine the rainfall depth associated with the 100-year storm (currently Technical

Paper-40 published May, 1961).

(2) ~~19.205:~~ Equipment

~~(1)~~(a) The operator shall provide equipment in adequate numbers and of appropriate type and size for the proper operation of the ~~transfer station or~~ handling facility in accordance with good engineering practice and in compliance with 310 CMR 19.000. All compactors or other processing units shall be in duplicate with each unit capable of handling the expected design tons per day; except when only one compactor or processing unit may be satisfactory:

~~(a)~~1. where the ~~transfer station or~~ handling facility will handle under 150 tons per day, or

~~(b)~~2. where adequate facilities to continue operation and/or an alternate method to handle all incoming refuse in an approved and sanitary manner in the event of a failure or breakdown is provided.

~~(2)~~(b) The operator shall make provisions for the routine maintenance of equipment to assure satisfactory performance capability for the various operations of the ~~transfer station or~~ handling facility.

~~(3)~~(c) The operator shall provide at the site suitable shelter or protection for all equipment and necessary service supplies used in connection with the ~~transfer station or~~ handling facility.

~~(4)~~(d) The operator shall make arrangements for providing standby equipment in the event of breakdown of regular equipment. Such standby equipment shall be available for use and shall be provided within 24 hours of breakdown; otherwise the disposal area shall be closed for receipt of wastes until equipment becomes available.

(3) ~~19.206:~~ Weighing Facilities

The operator ~~should~~ shall make provision on a continuous ~~or intermittent~~ basis for the weighing or measuring of refuse delivered to the ~~transfer station or~~ handling facility. Scales or other measuring devices may be required by the Department.

19.206: Construction and Demolition (C&D) Waste Processing Facilities Requirements

(a) All handling (unloading, storage, crushing, shredding, chipping, sorting, etc.) of ~~unprocessed~~ C&D waste shall occur indoors.

(b) All processed C&D waste and recovered or recyclable materials shall be stored in a manner appropriate for that material to protect the public health, safety or the environment. In general all processed C&D wastes shall be stored in covered containers or in covered piles on impervious surfaces.

(c) All storm water, or water used for site operations, that comes in contact with C&D materials and recovered or recyclable materials shall be controlled and collected and otherwise properly managed in accordance with all applicable local, state and federal requirements prior to discharge offsite.

19.207: ~~Transfer Station and~~ Handling Facility Operation and Maintenance Requirements

(1) General . Operators shall incorporate procedures and practices, in accordance with approved plans and permit conditions, which will prevent pollution of ground water, surface water and air quality and prevent dust, odors, noise and other nuisance conditions from developing.

(2) ~~19.219:~~ Supervision of Operation

~~(1)~~(a) The operator of the ~~refuse transfer station or~~ handling facility shall be under the overall supervision and direction of an engineer or other person qualified and experienced in matters of solid waste handling and disposal.

~~(2)~~(b) The operator of the ~~transfer station or~~ handling facility shall be knowledgeable of the requirements of 310 CMR 16.00 and 310 CMR 19.000, and of the general operating procedures and plans as prescribed by the design engineer.

~~(3)~~(c) The operator shall be required to demonstrate familiarity and capability to operate equipment at the ~~transfer station or~~ handling facility.

(3) ~~19.208:~~ Access to Facilities

~~(1)~~(a) The operator shall provide and maintain in good repair access roads at the facility. Such access roads shall be paved to minimize dust and designed and constructed so that traffic will flow smoothly and will not be interrupted by inclement weather.

~~(2)~~(b) The operator shall limit access to the facility to such periods of time as an attendant is on duty and to those persons authorized to use the facility for the disposal of refuse.

~~(3)~~(c) The operator shall prominently post at the entrance to the facility the hours of operation and all limitations and conditions of access.

~~(4)~~(d) The operator shall provide suitable barrier or fencing and gates to limit unauthorized persons from access to the facility and for the gate to be open only when an attendant or equipment operator is on duty. The gate shall be closed and locked at all other times.

(4) Access Roads . The access roads shall be constructed, graded and maintained to ensure that traffic flow will not be interrupted by inclement weather or traffic patterns.

(5) Security .

(a) The operator shall provide sufficient fences or other barriers to prevent access to the facility except at designated points of entry or exit.

(b) A gate shall be provided at all access points and shall be locked at all times when the operator or his agent is not on site or during hours when the facility is not operating.

(6) Posting of the Handling Facility.

The operator of a handling facility shall post signs at all access points to the facility which, at minimum, include the following information:

(a) the name(s) of the owner and operator of the facility;
(b) a 24 hour emergency telephone number for the facility;
(c) the hours of operation;
(d) a list of solid wastes banned or restricted pursuant to 310 CMR 19.017;
(e) other limitations and conditions of access to the facility; and
(f) penalties for unauthorized use.

(7) ~~19.209:~~ Unloading Refuse

The operator shall provide for continuous supervised unloading of refuse from incoming vehicles and shall post appropriate signs or other means to indicate clearly where incoming vehicles are to unload the refuse by direction of the attendant or equipment operator on duty.

~~19.213: Special Wastes~~

~~Special wastes will not be allowed at the transfer station except when approved in writing by the Department under any conditions the Department may require.~~

(8) Special Wastes. No solid waste that has been classified as a special waste pursuant to 310 CMR 19.061(2): *Special Waste* , shall be received or disposed at any handling facility unless the provisions of 310 CMR 19.061 are satisfied and the special waste is handled in accordance with any conditions specified by the Department in granting

approval to handle the special waste and in accordance with the handling provisions of 310 CMR 19.061.

(9) Banned or Restricted Solid Wastes . Solid wastes which have been banned or restricted from transfer or disposal pursuant to 310 CMR 19.017: *Waste Bans* , shall be managed at a handling facility in accordance with the approved facility plan prepared and approved in accordance with 310 CMR 19.017(5) unless an exception has been granted under 310 CMR 19.017(6).

(10) Hazardous Waste .

(a) No operator shall handle any material subject to the Hazardous Waste Regulations, 310 CMR 30.000, at a solid waste handling facility permitted pursuant to M.G.L. c. 111, § 150A.

(b) The operator shall implement a program, approved by the Department, for detection and exclusion of hazardous wastes.

(c) The operator shall, within 24 hours, ~~immediately~~ notify the Department and the board of health of the discovery of any material subject to the Hazardous Waste Regulations, 310 CMR 30.000.

(11) ~~19.214:~~ Disposal of Bulky Waste

~~(1)~~(a) The board of health may, by regulation, specify the maximum size of large, heavy, or bulky items to be disposed of at the ~~transfer station or~~ handling facility and may prohibit altogether the deposition of certain items.

~~(2)~~(b) If brush is accepted at the ~~transfer station or~~ handling facility, provisions should be made for the brush to be received in bundles no larger in size than can be handled in an acceptable and sanitary manner by the specific equipment. Brush should not be allowed to accumulate beyond 48 hours after deposition at the ~~transfer station or~~ handling facility.

(12) Bulky Wastes .

(a) An operator may accept bulky wastes where:

1. the handling of such wastes is consistent with the facility's permit or site assignment; and
2. the handling of such wastes can be carried out in a manner which is manageable and compatible with the facility's operation and maintenance plan and environmental control systems.

(b) The Department may disallow or place conditions on the handling of bulky waste at a handling facility in order to protect the engineering or operational integrity of the facility.

(13) Liquid Wastes .

(a) No liquid wastes shall be managed at a handling facility. With the exception of septage, contained liquid wastes generated by and produced in the normal operation of a household shall not be considered to be liquid wastes unless expressly excluded through 310 CMR 19.017: *Waste ~~Control~~ Bans*.

(b) For the purpose of 310 CMR 19.130 liquid wastes means any material that drains freely or contains free draining liquids, as determined by the Department using the Paint Filter Liquids Test, Method 9095 as described in USEPA Publication SW-846, as may be amended.

(14) Bird Hazards . The operator of facilities located in proximity to airports shall operate and maintain the facility in such manner as to minimize, to the extent practicable, the potential for the facility to pose a bird hazard to aircraft.

(15) ~~19.216:~~ Dust Control

The operator shall undertake suitable measures to control dust wherever and whenever necessary at the site, the access road, and any other areas related or under control of the refuse ~~transfer station or~~ handling facility operator. Water shall not be

used for dust control in amounts that produce excessive infiltration, ponding, runoff or erosion.

(16) ~~19.217~~: Vector ~~Insect and Rodent~~ Control

~~(1)~~(a) The operator shall cause routine refuse ~~transfer station or~~ handling facility operations to be carried out promptly in a systematic manner and shall take preventative measures to maintain conditions unfavorable for the attraction or production of insects, birds, ~~and~~ rodents and other vectors.

~~(2)~~(b) The Department or the board of health may require a routine program for the control and elimination of insects and rodents and other vectors at the ~~transfer station or~~ handling facility site. The operator shall cause supplemental control measures, including but not limited to the use of effective insecticides and rodenticides, to be implemented when necessary.

~~(3)~~(c) The application of pesticides shall be made only by a pesticide operator licensed by the Massachusetts Pesticide Board.

(17) ~~19.210:~~ Control of Wind-blown Litter

~~(1)~~(a) The operator shall take measures to prevent the scattering of refuse and wind-blown litter, including incorporating litter fencing, natural barriers or other devices to prevent the scattering of solid waste beyond the facility.

~~(2)~~(b) The operator shall provide for routine maintenance and general cleanliness of the entire ~~transfer station or~~ handling facility area. Such provisions are to be detailed on the engineering plans or written operating procedures.

(18) Equipment and Equipment Shelter .

(a) The operator shall provide equipment in adequate numbers and of appropriate type and size to ensure adequate compaction of solid waste and the proper operation and maintenance of the facility.

(b) The operator shall make provisions for and ensure that backup equipment is obtained within a reasonable time ~~24 hours~~ should the equipment used in daily operations become disabled for more than 24 hours. The facility shall cease operations should equipment not be available until such time as it becomes available to properly operate the facility.

(c) The operator shall provide suitable shelter or protection as necessary for all equipment and necessary service supplies used in connection with facility operations.

(19) Staffing .

(a) The operator shall provide an adequate number of trained staff to ensure that the facility is operated and maintained as designed and in accordance with good solid waste management practices.

(b) During posted hours of operation the operator shall be continuously present at the handling facility.

(20) Employee Facilities .

(a) The operator shall provide proper shelter and facilities for employees working at the facility. The shelter and facilities shall contain:

1. sufficient light and heat;
2. a safe drinking water supply;
3. sanitary handwashing and toilet facilities;
4. an operational telephone or two-way radio system; and
5. other equipment or appurtenances necessary for full compliance with OSHA and Department of Labor and Industries regulations.

(21) ~~19.218:~~ Accident Prevention and Safety

~~(1)~~(a) All employees shall be instructed in the principles of first-aid and safety and in the specific operational procedure necessary to prevent accidents.

~~(2)~~(b) The operator shall provide and maintain adequate first-aid supplies at the site at all times.

(c) The operator shall provide for two-way radios or telephones and ensure that the numbers for emergency medical care and ambulances are posted at the site.

(22) ~~19.207:~~ Fire Protection

The operator shall take suitable measures for the prevention and control of fires at the facility by complying with at least the following:

~~(1)~~(a) Make available at the facility an adequate supply of water under pressure with sufficient fire hose, unless a fully-manned fire station is located within two miles;

~~(2)~~(b) Hot loads shall not be accepted at the ~~transfer station or~~ handling facility;

~~(3)~~(c) Arrange for a nearby fire department to provide emergency service whenever called; and

~~(4)~~(d) Mount detachable fire extinguishers, maintained in working order, on all equipment and in all buildings.

(e) The operator shall ensure that no materials are stored, held, maintained or placed at a handling facility in such a manner as to pose a fire hazard.

(f) The operator shall be responsible for seeking fire-fighting assistance, initiating and providing assistance and/or resources for fire-fighting actions until all smoldering, smoking and burning cease.

(23) ~~19.215:~~ Recycling Operations

~~(1)~~(a) The operator may make provisions for the recycling of materials provided that a definite plan of procedure is implemented and followed to enable said operation to be carried out in an organized, sanitary, orderly and dependable manner with minimal interference to the routine ~~transfer station or~~ handling facility operations.

~~(2)~~(b) Any container, or specially designed enclosed area, used for the storage of recyclable materials (such as glass, cans, paper, *etc.*) shall be clearly identified and maintained in a clean and sanitary condition and the surrounding areas shall be kept in a similar condition.

~~(3)~~(c) All accumulated recyclable materials shall be removed from the disposal site at least every 60 days and/or at such other times as may be specified by the Department.

~~(4)~~(d) Refuse of a nature or in quantities that cause odor or pose a threat to the public health or are detrimental to the environment or the surrounding area shall not be accumulated.

(24) Waste Oil Collection at Handling Facilities . Waste oil other than the waste oil generated by the operator during normal maintenance of equipment used on-site may be collected and stored at handling facilities only with the approval of the Department.

(25) Household Hazardous Waste Collections at Handling Facilities . Household hazardous waste shall be collected at handling facilities only with the approval of the Department and consistent with the Hazardous Waste Regulations, 310 CMR 30.000.

~~19.220: Operational Records and Plan Execution~~

~~The transfer station facility operator shall maintain a daily log to record operational information, including the type and quantity of refuse received, the equipment, maintenance performed, personnel used, and any deviations made from the approved plan and specifications submitted to the Department.~~

(26) Records for Operational and Plan Execution .

(a) The operator shall maintain a daily log to record operational information, including but not limited to the type and quantity of solid waste received and the status of all environmental control or monitoring systems.
(b) The operator of existing or new handling facilities receiving 100 tons or more per day shall weigh all incoming solid waste.
(c) Operators of handling facilities that receive less than 100 tons per day shall, on a daily basis, estimate the total weight and volume of waste delivered based upon the capacity of the vehicles which delivered solid waste to the facility.
(d) The operator shall submit to the Department, no later than February 15th of each calendar year, an annual report summarizing the facility's operations for the previous calendar year or portion of a calendar year that waste is handled at the facility. Where the Department provides a form for annual reporting, the report shall be made on, and shall contain, all information as requested by that form. Otherwise, the report shall describe and summarize:

1. the amount of solid waste handled during that year with the quantity reported in tons;
2. all environmental monitoring and sampling data trends from ground water, surface water and gas monitoring systems from the monitoring required by the facility permit; and
~~2.~~ a demonstration of how the handling facility's operations during the year complied with the provisions of the recycling and composting plan contained as part of the facility's solid waste management permit.

(27) ~~19.211:~~ Screening and/or Fencing

The Department may require that the ~~transfer station or~~ handling facility be suitably screened by fencing, or other approved methods, to shield the area from adjoining properties.

(28) ~~19.212:~~ Open Burning

No open burning of any refuse, including brush, wood or diseased trees shall be permitted at the ~~transfer station or~~ handling facility site at any time of the year except as may be expressly permitted by the Department pursuant to 310 CMR 7.07: *Air Pollution Control*. ~~notwithstanding the provisions of any other law or regulation.~~

(29) ~~19.221:~~ Emergency Plan

An emergency plan, approved by the Department providing for an alternative disposal method in the event of mechanical breakdown or other cause preventing the normal operation of the subject ~~transfer station or~~ handling facility, shall be filed with the Department and the Local Board of Health and implemented whenever needed as conditions of health and public safety may require. Whenever the emergency plan is implemented the Department and the Local Board of Health shall immediately be notified.

(30) Inspections .

(a) The facility shall be inspected by a Massachusetts registered professional engineer, or other qualified professional approved by the Department, experienced in solid waste management, and retained by the owner/operator, on a frequency as approved by the Department in the Operation and Maintenance Plan.